THIS IS OUR SALESMAN

THE BARLOW HARDWARE CO.

CORRY, :: :: :: :: PENNSYLVANIA

WHOLESALE

IRON AND STEEL

BLACKSMITHS', MILLMEN'S AND LUMBERMEN'S

SUPPLIES

CARRIAGES AND WAGONS

1909

NET PRICE LIST NUMBER 25

DESTROY ALL PREVIOUS LISTS

rns

JOHN A. SEAVERNS

Webster Family Library of Veterinary Medicine
Cummings School of Veterinary Medicine at
Tufts University
200 Westboro Road
North Grafton, MA 01536

3 9090 013 408 899

No. 25

The Barlow Hardware Co.

CORRY, PA.

NET PRICE LIST

OF

IRON AND STEEL

Wagon and Carriage Hardware, Woodstock and Carriage Trimmings, Blacksmith's Tools, Mill and Lumbermen's Supplies

Carriages and Wagons

Announcement

We solicit comparison of our prices with those of other houses from whom you have been buying and we feel very confident that you will find it much to your interest to, at least, try us with a sample order.

Our Goods are standard, same as are handled by other houses in the same line as ourselves. They are not inferior quality as some may try to make you believe. We are heavy buyers, pay spot cash for everything and are willing to sell them to you at a fair margin of profit.

A successful business career of over twenty years' duration, is, we think, an earnest recommend of our commercial standing.

To those who have been in the habit of dealing with us, we extend our thanks, and solicit from them a continuance of their patronage, while those who have not as yet bought from us, we ask for a trial order.

PLEASE READ CAREFULLY

TERMS.

The prices named in this Price List are net Cash, no discount, and subject to market changes without notice. Unless otherwise agreed cash must accompany orders. To responsible parties terms will be made not longer than thirty days. No extension of time after thirty days. We will not pay exchange or express charges, as all bills are made payable at our office.

SHIPMENTS.

We do not ship any goods by express, C. O. D. unless there is enough money with orders to pay charges both ways if goods are refused. All parties not known to us, or who are not rated well in commercial agencies, must pay in advance, or we will ship goods by freight in our own name and collect the bill through your banker by sending draft with bill of lading attached, if sufficient money is sent us with the order to cover freight charges, both ways. Be sure and give us the name and location of your bank. No goods will be shipped to irresponsible parties unless cash accompanies orders. If credit is desired, mail your reference with your order.

ERRORS.

We make them, so does everybody. If we make a mistake, write us about it and give us a fair chance to correct our errors. Mistakes can often be prevented if our customers will see that the following information is given in their orders:

1st. Write name and postoffice very plainly.

2nd. Tell us your shipment point if different from postoffice.

3rd. Date your order.

4th. How to be shipped.

5th. Quantity wanted.

6th. Articles wanted.

7th. Be sure and sign your name. We get many orders without signatures.

8th. If on R. F. D. Route give number of route.

HOW TO SEND MONEY.

Remit by postoffice money order, express money order, bank draft, or for small amounts postage stamps will be accepted. Do not under any circumstances send money in a letter, except by registered mail.

OUR SHIPPING FACILITIES

Are excellent, Corry, Pa., is situated on the following railroads: Erie, Pennsylvania, and Philadelphia & Erie of Pennsylvania Railroad. We can ship in all directions on trunk lines. We have the following express companies: Wells Fargo, American and Adams. Unless otherwise specified goods are F. O. B. cars Corry. Where shipment from factory is deemed desirable it is stated in catalogue. Our responsibility ceases when goods are delivered to transportation company. When reporting a shortage, have your agent properly note shortage on paid freight bill and send the bill to us.

CLAIMS.

Claims for mistakes, etc., must be made immediately upon receipt of goods. Do not under any circumstances return any goods without first writing us and receiving shipping instructions, as in some cases goods should go direct to factory, thus saving freight charges.

OUR RESPONSIBILITY.

We have been engaged in this business in Corry for over twenty years, and own the ground and buildings we occupy (as well as the goods contained therein) which consists of seven buildings, giving us a floor space of 50,000 square feet. To those unacquainted with us, our ability and willingness to perform our part of the contract, we refer to any resident or business house of Corry, and by permission to the Citizens National Bank, or the National Bank of Corry.

Our financial standing can be ascertained of any of the commercial agencies, or of any reputable bank in America.

OUR DESIRE

Is to please you by giving you the best goods in the market at lowest prices, by prompt shipment of goods and by courteous treatment in all cases. We will appreciate all orders, large or small, and give each our most careful attention.

REMARKS ABOUT FREIGHT.

Many blacksmiths and wagon makers, located in different parts of the country, upon receiving our catalogue, write us saying: Your prices are very MUCH LOWER than we have been paying, but won't the freight from Corry to our city make up the difference? To such we say most emphatically NO. It is our aim to sell you goods with freight added, for less money than you can buy nearer home. The weight tables which follow will enable you to estimate the cost of delivery to your freight station.

It is very important that customers should write plainly their name and post-office address. In case there is no railroad running through your town and the goods are to go to some other town where there is a railroad, give the name of that town plainly and also the county it is in.

ESTIMATED WEIGHT OF ROUND AND SQUARE IRON.

Round.		One Foot in Length.				Square.	
Diam.	Weight.	Diam.	Weight.	Size.	Weight.	Size.	Weight.
3/16	.094	1	2.654	1/4	.241	1 1/8	4.278
1/4	.165	1 1/8	3.360	5/16	.330	1 1/4	5.280
5/16	.261	1 1/4	4.172	3/8	.475	1 3/8	6.390
3/8	.373	1 3/8	5.019	7/16	.647	1 1/2	7.604
7/16	.508	1 1/2	5.972	1/2	.845	1 5/8	8.926
1/2	.663	1 5/8	7.010	9/16	1.069	1 3/4	10.352
9/16	.840	1 3/4	8.128	5/8	1.320	1 7/8	11.883
5/8	1.043	2	10.616	3/4	1.901	2	13.520
3/4	1.493	2 1/4	13.440	7/8	2.588	2 1/4	17.112
7/8	2.032	2 1/2	16.688	1	3.380	2 1/2	21.120

For prices of Round and Square Iron, see pages 4 and 5.

ESTIMATED WEIGHT OF FLAT ROLLED IRON.

One Foot in Length.

Width	Thickness.										
inches.	1/8 in.	3/16 in.	1/4 in.	5/16 in.	3/8 in.	7/16 in.	1/2 in.	5/8 in.	3/4 in.	7/8 in.	1 in.
1/2	.242	.316	.422	.528	.634	.738	.845	1.056	1.265	1.477	1.690
5/8	.276	.395	.528	.660	.792	.923	1.060	1.320	1.584	1.846	2.112
3/4	.316	.474	.633	.792	.950	1.108	1.265	1.584	1.901	2.217	2.534
7/8	.369	.553	.738	.923	1.108	1.294	1.477	1.846	2.217	2.588	2.956
1	.422	.632	.845	1.056	1.267	1.478	1.690	2.112	2.534	2.956	3.380
1 1/8	.474	.711	.950	1.187	1.425	1.663	1.901	2.375	2.850	3.326	3.802
1 1/4	.528	.790	1.056	1.320	1.584	1.848	2.112	2.640	3.168	3.696	4.224
1 3/8	.581	.868	1.161	1.452	1.742	2.032	2.325	2.904	3.842	4.065	4.646
1 1/2	.634	.949	1.266	1.584	1.900	2.217	2.535	3.168	3.802	4.435	5.069
1 5/8	.687	1.027	1.372	1.716	2.059	2.402	2.746	3.432	4.119	4.805	5.492
1 3/4	.740	1.106	1.479	1.848	2.218	2.589	2.957	3.696	4.435	5.178	5.914
1 7/8	.793	1.185	1.584	1.980	2.376	2.772	3.168	3.960	4.752	5.544	6.336
2	.846	1.264	1.689	2.112	2.534	2.957	3.379	4.224	5.069	5.915	6.758
2 1/8	.899	1.343	1.795	2.244	2.693	3.141	3.591	4.488	5.385	6.283	7.181
2 1/4	.952	1.422	1.900	2.376	2.851	3.326	3.802	4.751	5.703	6.653	7.604
2 3/8	1.005	1.501	2.006	2.508	3.009	3.511	4.013	5.016	6.019	7.022	8.025
2 1/2	1.058	1.580	2.112	2.640	3.168	3.696	4.224	5.280	6.336	7.392	8.448
2 3/4	1.264	1.659	2.332	2.904	3.485	4.066	4.647	5.808	6.970	8.132	9.294
3	1.370	1.817	2.535	3.168	3.802	4.435	5.069	6.337	7.604	8.871	10.138
3 1/4	1.476	1.975	2.746	3.432	4.119	4.805	5.492	6.865	8.237	9.610	10.983
3 1/2	1.582	2.132	2.957	3.696	4.436	5.175	5.914	7.393	8.871	10.350	11.828
3 3/4	1.688	2.291	3.168	3.960	4.752	5.544	6.336	7.921	9.505	11.089	12.673
4	1.794	2.449	3.380	4.224	5.069	5.914	6.759	8.448	10.138	11.828	13.518

For prices of Flat Iron, see pages 4 and 5.

IRON.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

IRON TIRE.

Sets of 2 Bars 12 ft. and 2 Bars 15 ft. Lengths.

WE KEEP ROUND EDGE TIRE ONLY.

Sizes.		Net price Front Each.	Hind Each.	Per Set.
¾x¼	in..	$0.18	$0.23	$0.81
⅞x¼	in..	.20	.26	.92
1 x¼	in..	.23	.29	.96
1 x5/16	in..	.28	.35	1.25
1⅛x¼	in..	.25	.31	1.10
1⅛x5/16	in..	.28	.40	1.35
1⅛x⅜	in..	.34	.44	1.55
1¼x¼	in..	.29	.37	1.31
1¼x5/16	in..	.34	.44	1.55
1¼x⅜	in..	.37	.48	1.70
1¼x½	in..	.52	.63	2.29
1⅜x⅜	in..	.41	.55	1.92
1⅜x7/16	in..	.50	.63	2.25
1⅜x½	in..	.58	.71	2.55
1½x⅜	in..	.42	.56	1.95
1½x7/16	in..	.52	.65	2.30
1½x½	in..	.61	.73	2.65
1½x⅝	in..	.74	.92	3.30
1⅝x½	in..	.65	.79	2.85
1⅝x⅝	in..	.79	.99	3.55
1⅝x¾	in..	.95	1.19	4.27
1¾x⅜	in..	.50	.63	2.25
1¾x½	in..	.70	.84	3.05
1¾x⅝	in..	.87	1.04	3.80
1¾x¾	in..	1.03	1.28	4.60
2 x⅜	in..	.56	.72	2.55
2 x½	in..	.77	.96	3.46
2 x⅝	in..	.96	1.21	4.30
2 x¾	in..	1.20	1.46	5.30
2½x⅜	in..	.72	.87	3.15
2½x½	in..	.96	1.17	4.25
2½x⅝	in..	1.21	1.47	5.35
2½x¾	in..	$1.45	$1.81	$6.50
3 x⅜	in..	.87	1.06	3.85
3 x½	in..	1.16	1.38	5.05
3 x⅝	in..	1.42	1.77	6.35
3 x¾	in..	1.71	2.13	7.65
3½x5/16	in..	.90	1.17	4.14
3½x⅜	in..	1.02	1.29	4.60
3½x½	in..	1.38	1.68	6.10
3½x⅝	in..	1.71	2.12	7.65
3½x¾	in..	1.99	2.36	8.70
4 x5/16	in..	1.11	1.31	4.84
4 x⅜	in..	1.16	1.39	5.10
4 x½	in..	1.64	2.01	7.30
4 x⅝	in..	1.91	2.44	8.70
4 x¾	in..	2.24	2.71	9.90

SQUARE IRON.

Sizes.	Net price per 100 lbs.
1½ inch	$1.70
1⅜ inch	1.70
1¼ inch	1.70
1⅛ inch	1.70
1 inch	1.70
⅞ inch	$1.80
¾ inch	1.80
⅝ inch	1.90
9/16 inch	1.90
½ inch	2.10
7/16 inch	$2.10
⅜ inch	2.30
5/16 inch	2.50
¼ inch	2.70

See Table of Weights of Iron, page 3.

Iron cut to length, 1 cent per pound extra.

IRON CUT TO LENGTH 1 CENT PER POUND EXTRA.

ROUND IRON.

Sizes.	Net price per 100 lbs.
1½ inch	$1.70
1⅜ inch	1.70
1¼ inch	1.70
1⅛ inch	1.70

Sizes.	Net price per 100 lbs.
1 inch	$1.70
⅞ inch	1.80
¾ inch	1.80
⅝ inch	1.90
9/16 inch	2.00
½ inch	2.10

Sizes.	Net price per 100 lbs.
7/16 inch	$2.10
⅜ inch	2.30
5/16 inch	2.50
¼ inch	2.70
3/16 inch	4.70

HEAVY BAND AND STAKE IRON.

Sizes.	Net price per 100 lbs.
4 x¼ inch	$2.00
3½x¼ inch	2.00
3 x¼ inch	2.00
2¾x¼ inch	2.00
2½x¼ inch	2.00
2¼x¼ inch	2.00
2 x¼ inch	2.00
1¾x¼ inch	2.00
1½x¼ inch	2.00
1⅜x¼ inch	2.10
1¼x¼ inch	2.10

Sizes.	Net price per 100 lbs.
1⅛x¼ inch	$2.10
1 x¼ inch	2.10
⅞x¼ inch	2.30
¾x¼ inch	2.30
4 x3/16 inch	2.20
3½x3/16 inch	2.20
3 x3/16 inch	2.20
2¾x3/16 inch	2.20
2½x3/16 inch	2.20
2¼x3/16 inch	2.20

Sizes.	Net price per 100 lbs.
2 x3/16 inch	$2.20
1¾x3/16 inch	2.20
1½x3/16 inch	2.20
1⅜x3/16 inch	2.20
1¼x3/16 inch	2.20
1⅛x3/16 inch	2.30
1 x3/16 inch	2.30
⅞x3/16 inch	2.40
¾x3/16 inch	2.60

LIGHT BAND IRON.

Sizes.	Net price per 100 lbs.
5 x⅛ inch	$2.40
4 x⅛ inch	2.30
3½x⅛ inch	2.30
3 x⅛ inch	2.30
2¾x⅛ inch	2.30
2½x⅛ inch	2.30

Sizes.	Net price per 100 lbs.
2¼x⅛ inch	$2.30
2 x⅛ inch	2.30
1¾x⅛ inch	2.30
1½x⅛ inch	2.30
1⅜x⅛ inch	2.30
1¼x⅛ inch	2.30

Sizes.	Net price per 100 lbs.
1⅛x⅛ inch	$2.40
1 x⅛ inch	2.40
⅞x⅛ inch	2.55
¾x⅛ inch	2.70
⅝x⅛ in.	2.90

HALF OVAL IRON.

Sizes.	Net price per 100 lbs.
1 inch	$2.30
⅞ inch	2.30
¾ inch	2.40
⅝ inch	2.60
½ inch	3.00

HALF ROUND IRON

Sizes.	Net price per 100 lbs.
1 inch	$2.30
⅞ inch	2.30
¾ inch	2.40
⅝ inch	2.60
½ inch	3.00

OVAL IRON.

Sizes.	Net price per 100 lbs.
1 inch	$2.15
⅞ inch	2.15
¾ inch	2.30
⅝ inch	2.30
½ inch	2.55

WAGON BOX IRON.

Sizes.	Net price per 100 lbs.
⅞ inch, No. 12, Bevel Edge	$2.95
¾ inch, No. 12, Bevel Edge	3.25

HOOP IRON.

Sizes.	Net price per 100 lbs.
1½ inch, No. 16	$3.40
1¼ inch, No. 18	3.40
1⅛ inch, No. 19	3.65
1 inch, No. 19	3.65
⅞ inch, No. 20	3.90
¾ inch, No. 22	4.15

SHAFT OR PERCH IRON.

Bevel Edge.

Sizes.	Net price per 100 lbs.
1¼x⅜ inch	$2.10
1¼x5/16 inch	2.35
1⅛x5/16 inch	2.35
1 x5/16 inch	2.35
1 x¼ inch	2.60

ANGLE STEEL.

Factory shipments only.

Sizes.	Net price per 100 lbs.
1¼ inch and heavier	$3.00

Iron cut to length 1 cent per pound extra.

Iron and Steel Cut to Length 1 Cent per Pound Extra

HORSE SHOE BAR.

Sizes.	Net price per 100 lbs.
⅝x⅜ inch	$2.45
⅝x½ inch	2.45
¾x⅜ inch	2.45
¾x½ inch	2.45
⅞x⅜ inch	2.45
⅞x½ inch	2.45
1 x⅜ inch	2.45
1 x½ inch	2.45
1 x⅝ inch	2.45
1⅛x⅜ inch	2.45

NORWAY OR SWEDES IRON.

IMPORTED.

Sizes.	Net price per 100 lbs.
Flats, 1 x⅜ to 3x½ in.	$4.00
Flats, ¾x¼ to 3x5/16 in.	4.00
Rounds, 1 to 1¼ diam.	4.00
Rounds, ⅝ to ⅞ diam.	4.00
Rounds, ¼ to ½ diam.	4.00
Squares, 1 to 2 diam.	4.00
Squares, ⅝ to ⅞ diam.	4.00
Squares, ¼ to ½ diam.	4.00

Cut to length 1 cent per pound extra.

TOE CALK STEEL.

Round Edge.

Sizes.	Net price per 100 lbs.
1 x½ inch	$2.50
1 x7/16 inch	2.50
⅞x½ inch	2.50
⅞x7/16 inch	2.50
⅞x⅜ inch	2.50
¾x½ inch	2.50
¾x7/16 inch	2.50
⅝x⅜ inch	2.50
¾x⅜ inch	2.50
⅝x½ inch	2.50
9/16x⅝ inch	2.50
½x7/16 inch	2.50
½x⅜ inch	2.50
7/8x⅜ inch	2.50
⅞x5/16 inch	2.75
¾x5/16 inch	2.75
⅝x5/16 inch	2.75
½x5/16 inch	2.75
7/8x5/16 inch	3.10
⅜x5/16 inch	3.10
¾x¼ inch	3.25
⅝x¼ inch	3.25
½x¼ inch	3.25
7/8x¼ inch	3.75
⅜x¼ inch	3.75
5/16x¼ inch	3.75

Less than 100 pound bundle ¼ cent per lb. extra.

FLAT SPRING STEEL.

Sizes.	Net price per lb.
2 1¾ 1½ 1⅜ 1¼x¼ inch	3½c

Cut to length 1 cent per lb. extra.

ROUND MACHINERY STEEL.

Sizes.	Net price per 100 lbs.
1½ inch	$1.95
1⅜ inch	1.95
1¼ inch	1.95
1⅛ inch	1.95
1 inch	1.95
⅞ inch	1.95
¾ inch	1.95
⅝ inch	2.05
½ inch	2.15
⅜ inch	2.45
5/16 inch	2.55

CANT HOOK STEEL.

Sizes.	Net price per lb.
⅞x½ inch	5c
1 x7/16 inch	5c
1⅛x7/16 inch	5c
1¼x½ inch	5c

SLEIGH SHOE STEEL.

Sizes.	Net price per 100 lbs.
⅞x½ inch	$2.00
1 x½ inch	2.00
1¼x½ inch	2.00
1½x½ inch	2.00
1¾x½ inch	2.00
2 x½ inch	2.00
2½x½ inch	2.00
3 x½ inch	2.00
1½x⅝ inch	2.00
1¾x⅝ inch	2.00
2 x⅝ inch	2.00
2½x⅝ inch	2.00
3 x⅝ inch	2.00

STRUCTURAL STEEL.

CHANNELS.

I BEAMS.

ANGLES.

Prices quoted on application.

Shipped from factory.

TOOL STEEL.

McInnis.

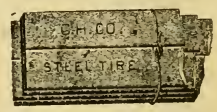
8 to 10 ft. bars.

⅝ to 1½ square	8c
⅝ to 1½ round	8c
⅝ to 1½ octagon	8c
9/16 and ½ square	8½c
7/16 and ⅜ square	9c
5/16 and ¼ square	10c
9/16 and ½ round	8½c
7/16 and ⅜ round	9c
5/16 and ¼ round	10c
9/16 and ½ octagon	8½c
7/16 and ⅜ octagon	9c
5/16 and ¼ octagon	10c
1 to 3x½ flat	9c
1 to 3x⅜ flat	9c
¾ to 3x5/16 flat	9½c
¾ to 3x¼ flat	10c

Steel cut to length 1 cent per pound extra.

STEEL BUGGY TIRE.

Round Edge.



Sizes	Net price. Front Each	Hind Each	Per Set
¾x3/16 in.	$0.18	$0.20	$0.65
¾x7/32 in.	.21	.23	.75
¾x¼ in.	.23	.25	.80
⅞x3/16 in.	.21	.23	.75
⅞x7/32 in.	.24	.26	.85
⅞x¼ in.	.25	.28	.90
⅞x5/16 in.	.31	.35	1.15
1 x5/16 in.	.21	.23	.80
1 x¼ in.	.28	.34	1.05
1 x5/16 in.	.35	.40	1.30
1⅛x¼ in.	.31	.35	1.15
1⅛x5/16 in.	.39	.44	1.45
1⅛x⅜ in.	.48	.54	1.80
1¼x¼ in.	.39	.44	1.45
1¼x5/16 in.	.43	.48	1.60
1¼x⅜ in.	.52	.58	1.95
1⅜x⅜ in.	.60	.65	2.25
1½x⅜ in.	.62	.67	2.30

Iron and Steel Cut to Length 1 Cent per Pound Extra

CABLE CHAIN.

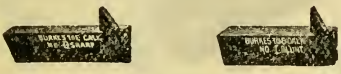
Straight.

Twist Link.

Size	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
Net price, lb.	10	6½	5	4½	4½	4	4	4
Weight, 100 ft., lbs.	50	90	122	160	200	250	420	590

We carry Twist Link Chain in ¼ and 5/16 inch only. For Twist Link Chain add ½c per lb. to above.

BURKE'S TOE CALKS.



Sizes. Net price per 25 lb. box.

One Prong Blunt, Nos. 0 to 6.....$1.15
One Prong Sharp, Nos. 0 to 6..... 1.25

½ cent per pound extra in less than full boxes.

STANDARD TOE CALKS.

Blunt. Sharp.

Sizes. Net price per 25 lb. box.

Long Blunt, Nos. 0 to 6.....$1.15
Long Country, Nos. 0 to 6..... 1.15
Long Sharp, Nos. 0 to 6..... 1.25

½ cent per pound extra in less than full boxes.

STEEL CUTTER SHOES.

TAPERED AND BENT.

Sizes. Net price per pair.

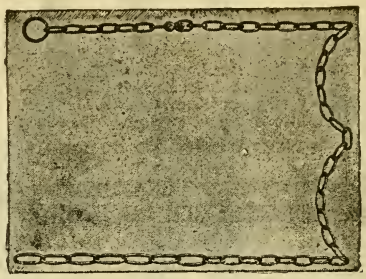
¾x⅜ inch $0.42
¾x7/16 inch ..... .49
¾x½ inch ..... .55
⅞x⅜ inch ..... .49
⅞x7/16 inch ..... .54
⅞x½ inch ..... .60
1 x½ inch ..... .69
1 x⅝ inch ..... .89

BUTT CHAINS.

Sizes. Net prices per pair.

30 in. long, 10 links to ft., No. 2 wire with Rings $0.30
30 in. long, 10 links to ft., No. 2 wire with Hooks ..... .35
30 in. long, 10 links to ft., No. 2 wire with Snaps ..... .38

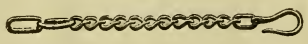
TRACE CHAINS.



Sizes. Net price per pair.

6½ feet long, 10 links to foot, No. 2 Wire with Rings $0.45
6½ feet long, 10 links to foot, No. 2 Wire with Hooks ..... .50
6½ feet long, 10 links to foot, No. 2 Wire with Snaps ..... .55
7 feet long, 10 links to foot, No. 2 Wire with Rings ..... .55
7 feet long, 10 links to foot, No. 2 Wire with Hooks ..... .60
7 feet long, 10 links to foot, No. 2 Wire with Snaps ..... .65

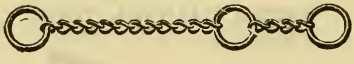
STAY CHAINS.



Sizes. Net price per pair.

5/16 Link, ⅝ Hook $0.27

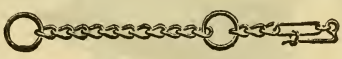
TONGUE CHAINS.



Sizes. Net price per pair.

5/16 Link, ½ Ring $0.42

LOCK CHAINS.



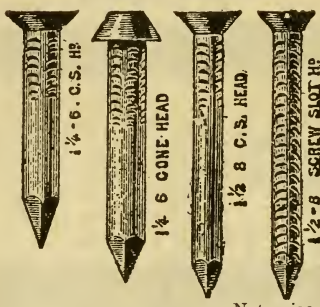
Sizes. Net price per pair.

5/16 Link, 42 in. long $0.80

CAST BOB SLED SHOES.

Sizes	32	34	36	38	40	42	44
Net price per lb.....	$0.03						

WAGON NAILS.



Sizes.	Net price per lb.
1¼ and 1½x3/16 in. Cone Head	$0.07
1¼ and 1½x¼ in. Cone Head	.07
1¼ and 1½x3/16 in. Countersunk Head	.07
1¼ and 1½x¼ in. Countersunk Head	.07

STEEL HARROW TEETH.

Sizes.	Net price each.
½ inch square, 9 in. or 10 in. long	$0.02½
⅝ inch square, 10 in. or 11 in. long	.03½
¾ inch square, 10 in. or 11 in. long	.06
⅞ inch square, 12 in. long	.08

STEEL CROW BARS.

WEDGE POINT.

Sizes, inches	1	1⅛	1¼	1⅜
Net price each	$0.40	.45	.60	.80

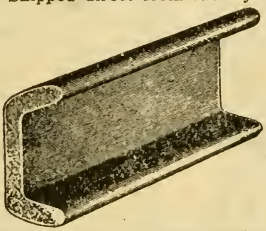
WOOD-CHOPPERS' WEDGES.

REGULAR PATTERN.

Solid Steel, Axe Finish, Net price, lb..$0.05½

STEEL CHANNEL TIRE.

Shipped direct from factory.



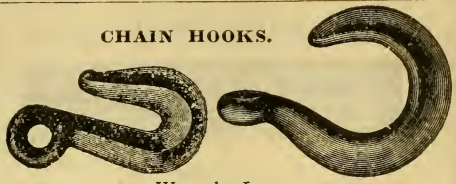
FOR SOLID RUBBER TIRE.

Sizes.	Net price pet set.
¾ inch	$0.90
⅞ inch	1.12
1 inch	1.25
1⅛ inch	1.55

For wheels 3 ft. 4 in. and 3 ft. 8 in. high and lower.

For price of Rubber Tire, see Wheels.

CHAIN HOOKS.



Wrought Iron.

Sizes.	Grab Hooks.	Flat Hooks. Net price each.
¼ inch	Grab or Flat	$0.07
5/16 inch	Grab or Flat	.08
⅜ inch	Grab or Flat	.09
7/16 inch	Grab or Flat	.10
½ inch	Grab or Flat	.14
⅝ inch	Grab or Flat	.18

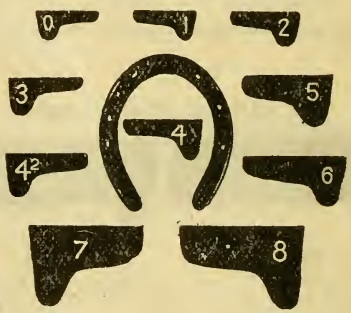
COLD SHUTS.

Wrought Iron.

Sizes.	Net price each.	Net price Doz.
¼ in.	$0.02	$0.20
5/16 in.	.03	.20
⅜ in.	.03½	.35
7/16 in.	.04	.40
½ in.	.05	.50
⅝ in.	.06	.60

B. & M. PATENT RIBBED STEEL.

Sectional Views of



Weights per ft. of Steel Eight ft. Bars.

Sizes.	Oz. to ft.	Net price per lb.	Sizes.	Oz. to ft.	Net price per lb.
No. 0	3½	$0.12	No. 4½	9	$0.09½
No. 1	4½	.11	No. 5	.11	.09½
No. 2	5½	.11	No. 6	.13	.09
No. 3	6½	.10	No. 7	.21½	.08
No. 4	7½	.09½	No. 8	.25	.08

Unsurpassed for Track Shoeing.

This steel has been in use several years all over the country, on many of the best horses giving the most satisfactory results.

Shoes of this design give a sure, firm and natural foothold on any kind of road or track; do not cup, and prevent slipping.

They give a greater bearing surface for the foot, and are stiffer than any shoe of equal weight.

Decreased striking surface prevents concussion; the horse will go with less weight and shorter foot than with any other plain shoe. For road work they are unequaled.

BARLOW IRON HORSE SHOES.

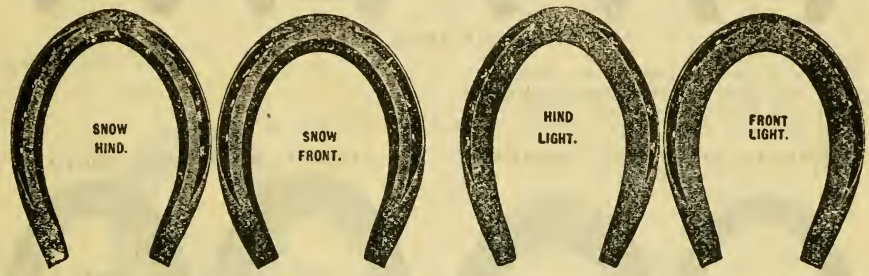
SPECIAL OFFER

BARLOW IRON SHOES

ALL PATTERNS AND SIZES 2 TO 6

1 KEG OR MORE, $3.75 PER KEG

ASSORTED KEGS CONTAINING MORE THAN ONE SIZE, 15c PER KEG EXTRA



BARLOW IRON SNOW SHOES. BARLOW IRON LIGHT SHOES.

Sizes. PER KEG.	Net price per keg.
No. 2 to 6 Barlow Iron light pattern	$3.75
No. 0 to 1 Barlow Iron light pattern	4.00
No. 2 to 6 Barlow Iron extra light pattern	3.75
No. 0 to 1 Barlow Iron extra light pattern	4.00
No. 2 to 6 Barlow Iron snow pattern	3.75
No. 0 to 1 Barlow Iron snow pattern	4.00

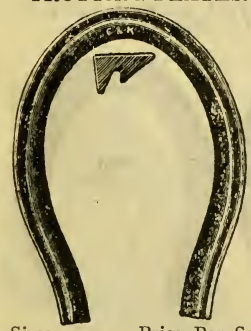
Stock assortments one size all front—one size all hinds—one size front and hinds. Kegs containing more than one size 15 cents extra. Shoes less than 100 lbs. 4½ cents per pound.

THE BARLOW IRON HORSE SHOES.

Have been used by hundreds of the leading horseshoers for five years past—they are made from the best iron—we will guarantee them to give satisfaction in every possible way or they can be returned at our expense.

SEND US AN ORDER FOR A SAMPLE LOT.

BOSS STEEL TROTTING PLATES.

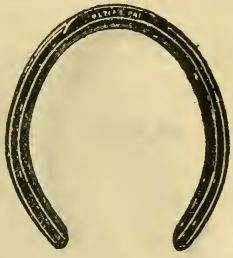


Sizes.	Price Per Set.
No. 0 to 4	35c
Postage per set	35c

THE BOSS STEEL RACING PLATE.

Sizes.	Price Per Set.
No. 0 to 4	45c
Postage per set	20c

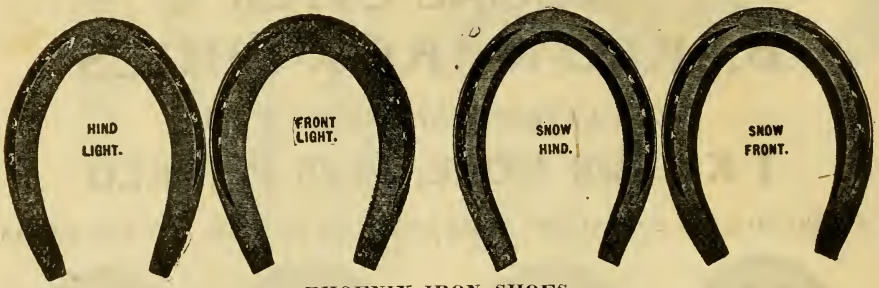
TOED RACING PLATES.



Sizes.	Price Per Set.
No. 0 to 4	75c
Postage per set	20c

HORSESHOES.

Fifteen cents extra for assorted kegs containing more than one size.

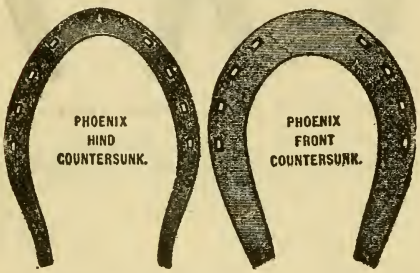


PHOENIX IRON SHOES.

Sizes.	Net price per keg.
No. 0 to 8 Phoenix Light Iron Shoes	$4.15
No. 0 to 6 Phoenix Extra Light Iron Shoes	4.15
No. 0 to 8 Phoenix Iron Snow Shoes	4.15

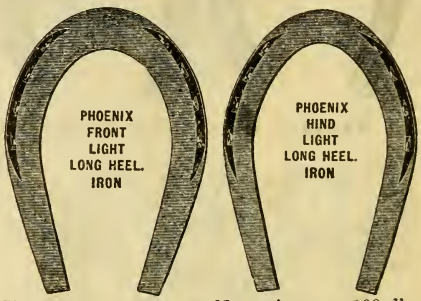
No. 0 and 1, 25 cents advance. Price, less than 100 lbs., 4½c per pound.

PHOENIX STEEL COUNTERSUNK SHOES.



Sizes.	Net price per 100 lbs.
No. 0 to 5 Front and Hind	$5.35

PHOENIX LONG HEEL SHOES.



Sizes.	Net price per 100 lbs.
No. 2 to 7 Front and Hind	$4.15
No. 0 to 1 Front and Hind	4.40

BURDEN IRON SHOES.

Sizes.	Net price per keg.
No. 0 to 8 Burden Light Iron Shoes	$4.15
No. 0 to 7 Burden Extra Light Iron Shoes	4.15
No. 0 to 8 Burden New Easy Iron Snow Shoes	4.15

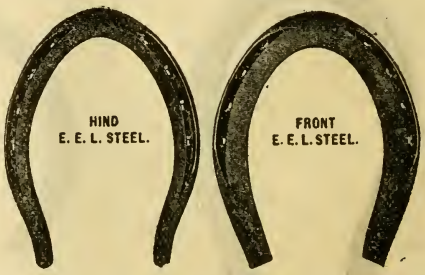
Stock assortment, one size all front—one size all hinds—one size front and hinds. Price less than 100 lbs. 4½c per pound.

PERKINS' TOE AND SIDE WEIGHT SHOES.

	Net price per 100 lbs.
Side Weights, 0 to 4, Hinds only	$8.35
Toe Weights, 0 to 4, Fronts only	6.35

Price less than 100 lbs. ¼c per pound extra.

PHOENIX EXTRA EXTRA LIGHT STEEL SHOES.



Sizes.	Net price per 100 lbs.
No. 0 to 6, Front and Hind	$5.10

OX SHOES.

Net price per lb.
Ox Shoes, all sizes $0.11

MULE SHOES.

Net price per keg.
Mule Shoes, all sizes $4.15
Price less than kegs, 4½ cents per pound.

BARLOW HORSE NAILS.

The tensile strength of iron used in the manufacture of the BARLOW HORSE NAIL surpasses that of any other material used for Horse Nails, and combining, as it does, every quality for a superior Nail, we get, by our process, a soft and uniform Nail, hardened at the extreme point for driving, the same as when made by hand, and believe we offer to the trade the most perfect Horse Nails in America; in other words, we give a better article at the same price.

HORSE SHOE NAILS.

The Iron Made from

BARLOW HORSE NAILS.

Sizes	Net price per lb.	Sizes	Net price per lb.
No. 5	$0.10	No. 8	$0.10
No. 6	.10	No. 9	.10
No. 7	.10	No. 10	.10

RELIANCE HORSE NAILS.

Sizes	Net price per lb.	Sizes	Net price per lb.
No. 5	$0.12	No. 8	$0.12
No. 6	.12	No. 9	.12
No. 7	.12	No. 10	.12

CAPEWELL HORSE NAILS.

Size:	Net price per lb.	Size:	Net price per lb.
No. 4	Lowest	No. 8	Lowest
No. 5	market	No. 9	market
No. 6	price.	No. 10	price.
No. 7			

A full stock of Capewell Nails always on hand.

VULCAN HORSE NAILS.

Sizes	Net price per lb.	Sizes	Net price per lb.
No. 4	$0.35	No. 8	$0.14
No. 5	.17½	No. 9	.13
No. 6	.15	No. 10	.13
No. 7	.14½		

Note—We have all of above Nails in both regular and city heads packed in 5 lb. paper boxes and 25 lb. wood boxes.

Nails in less than 5 lb. boxes, 2 cents per pound extra.

GAISTER MFG. CO.'S PEAT MOSS PETROLEUM HOOF PACKING.

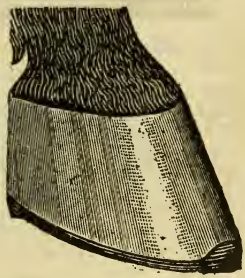
Before Using.

All others are imitation.

For use in the stable and shoeing Forge. A sure preventive and cure for all diseases which horses' feet are liable to. It has cured hundreds. No hoof can remain hard and unhealthy where it is used. You need not change the packing should your horse remain in the stable a month at a time.

Used under leather with perfect satisfaction. It will never dry, and will not act as a poultice. It is Nature's own remedy.

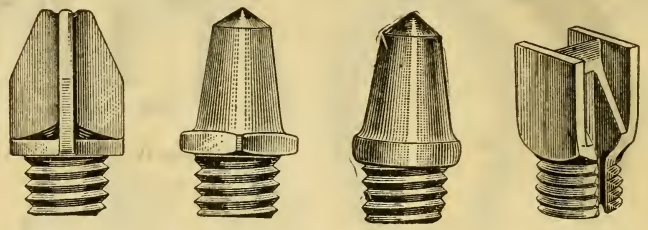
No. 1. 20 lb. buckets.....$1.25 each
No. 2. 10 lb. buckets..... .90 each



After Using.

NEVERSLIP CALKS.

THEY SAVE MONEY AND MAKE CUSTOMERS. EVERY SHOER SHOULD USE ONE.



Keystone | No. 1. Sharp Calk | No. 4. Square Shoulder. | No. 5. Red Cross Calk.

STYLES OF CALKS TO USE.

Same Price Applies to All.

Particular attention is directed to the selection of a style of calk suitable for the work you have in hand, care being used that calks be selected to suit conditions.

No. 1 Calks are adapted for snow and ice conditions, streets and roads slippery and a sure footing impossible. Under these conditions the Nos. 1 and 4 Calks have no equal, and will do all the manufacturers claim for them. They positively "NEVERSLIP."

No. 4 is the same as No. 1, except it has a square shoulder, requiring no special wrench to insert or remove.

No. 5 For asphalt or other hard pavements. Its construction being such that it wears flat, and the flatter the wear, the sharper the angles become, making it impossible to slip in any direction.

"KEYSTONE" Calks are made of an H shape material. This calk possesses features different from other calks and has many friends. Is good with or without snow or ice.

Any style Neverslip Calk interchangeable with any other style of the same size.

Sold only in boxes of 50.

Size, inches	5/16	3/8	7/16	1/2	9/16	5/8
Net price, per 100 Red Tip	$2.00	$2.20	$2.40	$2.60	$2.80	$3.20
Net price, per 100 Blizzard	1.80	2.00	2.20	2.40	2.60	3.00

Keystone, all sizes, $2.00 per 100; Red Cross, all sizes, $2.00 per 100.

5/16 Calks made only in Style No. 1.

NEVERSLIP HAND TAPS.

No other taps can be used with Neverslip Calks.

Sizes	5/16	3/8	7/16	1/2	9/16	5/8 in.
Hand	25	30	35	40	45	50c ea.
Stub	25	30	35	40	45	50c ea.

Neverslip Hand Taps are for cutting threads in the Calk holes by hand, and are used with an ordinary tap wrench. They are made to cut a thread that corresponds exactly to the thread on the Calk, and are the only ones that can be successfully used.

NEVERSLIP TWIST DRILLS.

When using Neverslip Calks in hand-made Shoes it is necessary to use Neverslip Twist Drills of following sizes, as they are the only correct sizes for Neverslip Taps and Calks.

Size of Drill	19-64	23-64	13/32	29-64	33-64
To drill hole for Tap and Calk	5/16	3/8	7/16	1/2	9/16	5/8 in.
1/2 in. Shank	32	38	43	46	51	60c ea.

NEVERSLIP TAPPING MACHINE.

Shipped direct from factory.

Consists of a base or frame in connection with a hand wheel and sliding shaft for the rapid cutting or tapping of threads for calks.

	Net price each
Without taps	$6.50
With full set of Tapper Taps	8.25

We do not break boxes of Neverslip Calks.

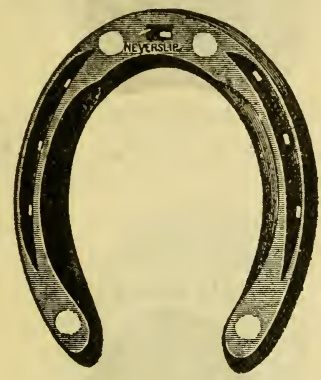
NEVERSLIP HORSE SHOES.

NEVERSLIP SHOES are furnished in two styles, viz.:

1st, DRILLED. Have holes drilled for Neverslip Taps and Calks, and are sold by keg or pound only.

2nd, CALKED. Have Calks inserted. Are sold by the set and pair. Packed 5 set or 10 pair in a box. Drilled shoes are now sold at a price that simply covers the cost of drilling the holes (about 4 cents a set) and are therefore much cheaper for the shoer than the Blank Shoes without holes.

NEVERSLIP DRILLED SHOES.

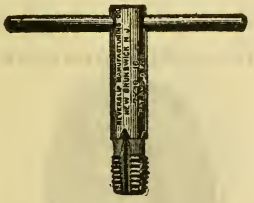


NEVERSLIP CALKED SHOES.

WEIGHT OF DRILLED SHOES.

Weight	front	shoe,	0-11	oz.	drilled	for ⅜	calks
"	"	"	1-12	"	"	⅜	"
"	"	"	2-15	"	"	7/16	"
"	"	"	3-17	"	"	7/16	"
"	"	"	4-21	"	"	½	"
"	"	"	5-29	"	"	9/16	"
"	"	"	6-32	"	"	⅝	"
"	"	"	7-36	"	"	⅝	"
"	"	"	8-42	"	"	⅝	"

NEVERSLIP STUB TAPS.



For use in repairing any damage to threads in Calk holes without removing the shoe.

Sizes, inches..	5/16	⅜	7/16	½	9/16	⅝
Net price, ea..	$0.25	.30	.35	.40	.45	.50

NEVERSLIP WRENCH.

Made especially for adjusting Neverslip Calks; inserts and removes all sizes with ease and certainty.

Net price each $0.50

NEVERSLIP SHOES.—PRICES.

	Net prices per lb.
Iron Shoes, No. 2 and larger, drilled..	$0.06¾
Iron Shoes, No. 0 and 1.....	.07
Steel Light Hind, No. 2 & larger, drilled	.09
Steel Light Hind, No. 0 or 1.....	.09¼

	Net price per set
Calk Iron Shoes, sizes 0 and 1.....	$0.70
" " " " 2.....	.75
" " " " 3.....	.80
" " " " 4.....	.85
" " " " 5.....	.95
" " " " 6.....	1.10
" " " " 7.....	1.25
" " " " 8.....	1.30

No shoes drilled other than regular.

NEVERSLIP TAPS AND CALKS.

A PATTERN DRILLED

Nos.	6	7	8
Holes drilled for	⅝	⅝	⅝

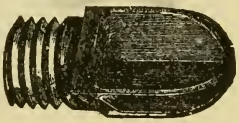
B PATTERN DRILLED

Nos.	0	1	2	3	4	5
Holes drilled for.....	⅜	⅜	7/16	7/16	½	9/16

STEEL HIND PATTERN—DRILLED.

Nos.	0	1	2	3	4	5
Holes drilled for.....	⅜	⅜	7/16	7/16	½	½

CAN'T SLIP CALKS.



Sizes, inches ..	⅜	7/16	½	9/16	⅝
Net price, 100..	$2.00	2.00	2.00	2.00	2.00

We do not break boxes of Neverslip Calks.

HORSE SHOE PADS.

Made by Reserve Rubber Company.

GLOBE.

Canvas Back.

Sizes	Net price per pair
No. 1	$0.70
No. 2	.75
No. 3	.80
No. 4	.85
No. 5	1.00
No. 6	1.20

Note.—This is an open pad for general use.

IDEAL.

Leather Back.

Sizes	Net price per pair
No. 1	$0.90
No. 2	.90
No. 3	.90
No. 4	.90
No. 5	1.05
No. 6	1.30

Note.—A full pad for general use.

ACME.

Canvas Back.

Sizes	Net price per pair
No. 1	$0.65
No. 2	.65
No. 3	.65
No. 4	.65
No. 5	.75

SARATOGA.

White Rubber Leather Back.

Sizes	Net price per pair
No. 1	$0.90
No. 2	.90
No. 3	.90
No. 4	.90
No. 5	1.05

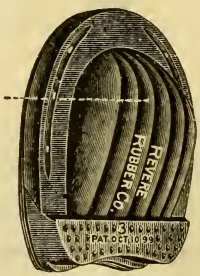
AIR CUSHION ROAD.

Leather Back.

Sizes	Net price per pair
No. 2½	$0.95
No. 3	.95
No. 3½	.95
No. 4	.95
No. 4½	1.10

Note.—This pad is made for light driving—being not so wide as the regular air cushions.

AIR CUSHION REGULAR.



Leather Back.

Sizes	Net price per pair
No. 1	$0.95
No. 2	.95
No. 3	.95
No. 4	.95
No. 5	1.20
No. 6	1.40

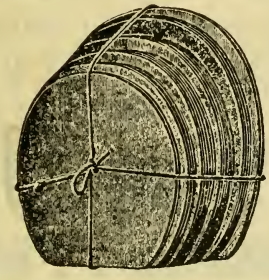
Note.—The air cushion fills with air at each step, breaking concussions, used in cases of hoof lameness.

HORSE SHOE PADS.

DAVIE RUBBER PAD.

FRONTS ONLY.

Nos.	1	2	3	4	5	6
Net price, pair..	$0.90	.90	.90	.90	1.00	1.25



SOLE LEATHER—Extra Good Stock.

	Net price per pair		Net price per pair
No. 1	$0.11	No. 4	$0.17
No. 2	.12	No. 5	.20
No. 3	.15	No. 6	.23

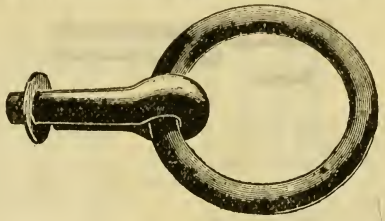
RUBBER PAD SHOE.

Sizes	Net price per set	Sizes	Net price per set
No. 1	$1.80	No. 4	$2.60
No. 2	2.00	No. 5	3.00
No. 3	2.30	No. 6	3.25

Pairs at one-half set price.

The W. & B. Rubber Shoe consists of a forged steel frame with uneven surface, both top and bottom, over which is firmly vulcanized a cushion of rubber which fills a channel on the under side, swelling out at the inside of the heels, forming solid rubber pads which give frog pressure, prevent slipping, fitting cold and will wear as long as an ordinary shoe under the same conditions.

HAME BREAST RINGS AND STUDS.



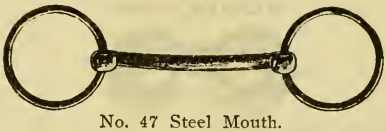
	Net price per doz.	each
No. 965 Polished with burrs	$0.32	$0.04

GRAY IRON BREAST STRAP SLIDES.

No. 47. Japanned.

Sizes in stock	G-1¼ in.	J-1½ in.	L-1¾ in.
Net price per doz.	$0.36	$0.36	$0.41
Net price each..	.04	.04	.05

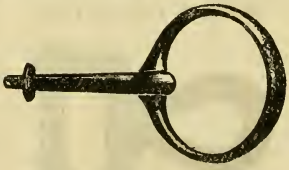
WROUGHT IRON BITS.



No. 47 Steel Mouth.

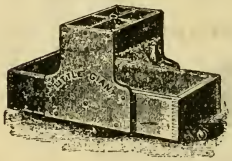
	Net price per doz.
2¾ in. Ring and C. Plate Stiff Mouth	$0.60
2¾ in. Ring and C. Plate Jointed Mouth	.60
	Net price each
2¾ in Ring and C. Plate Stiff Mouth	$0.07
2¾ in. Ring and C. Plate Jointed Mouth	.07

HAME LINE RINGS AND STUDS.



	Net price per doz.	each
No. 964 Polished with burrs	$0.25	$0.03

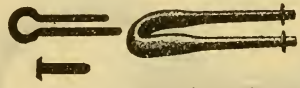
LITTLE GIANT FARRIER'S TOOL BOX.



Made of thoroughly well seasoned stock, lock cornered, mortised bottom and side pieces, finely finished and thoroughly made in every respect. This case, properly used, will last a horseshoer very much longer than those commonly in use. A cheap, strong, durable box for Horseshoers' Tools.

Net price each $1.75

HAME CLIPS, STAPLES AND RIVETS.



	Net price each.	per doz.
Hame Clips, 2 hole, 3/8 inch..	$0.02	$0.20
Hame Clips, 3 hole, 3/8 inch..	.03	.28
Hame Clips, 3 hole, 7/16 inch..	.04	.38

	Net price each.	per doz.
Hame Staples, 3/8 inch.....	$0.02	$0.20
Hame Staples, 7/16 inch.....	.03	.26

	Net price per lb.
Hame Rivets, 7/8 inch.....	$0.09
Hame Rivets, 1 inch.....	.10

TRACE DEES.

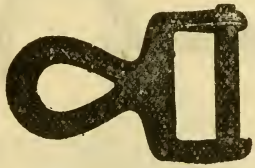
Size, inches	1½	1¾	2	2¼	2½
Net price, doz.....	$0.50	.55	.65	.70	.75
Net price, each....	.05	.06	.07	.08	.09

REPAIR LINKS.

Sizes in stock, inches,	A	B	C	D	E
No. 7650	¼	5/16	3/8	7/16	½
Price per dozen....	$0.22	.32	.43	.55	.75
Price, each	.02	.03	.04	.05	.07

All that is necessary in order to repair a broken chain is to open the link, hook the chain in each end of link and then close the link. No pounding or hammering.

SCREW COCKEYES.



Size, inches	1½	1¾	2
Net price, per doz.....	$0.25	.30	.40
Net price, each.....	.03	.04	.05

CLIP COCKEYES.

With Wrought Iron Clips.

Sizes	Net price each	Sizes	Net price per doz.
1½ inch	$0.05	1½ inch	$0.40
1¾ inch	.06	1¾ inch	.45

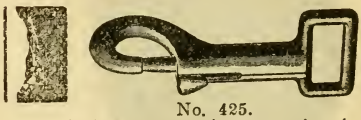
UTILITY COCKEYES.

Sizes, inches	1¾	2
Net price, per doz.....	$0.50	.75
Net price, each.....	.06	.07

GERMAN HARNESS SNAPS.

Sizes, inches	5/8	3/4	7/8	1	1¼	1½	1¾	2
Net price, doz.	$0.15	.15	.15	.15	.26	.34	.44	.50
each	.02	.02	.02	.02	.03	.04	.05	.06

DIXIE BOLT SNAPS.



No. 425.

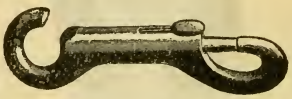
Sizes, inches	3/4	1	1¼	1½	1¾	2
Net price, doz.....	$0.25	.30	.35	.40	.45	.50
Net price, each....	.03	.04	.04	.05	.05	.06

BREAST STRAP ROLLER BOLT SNAPS.

No. 439.

Size, inches	1¾
Net price, per doz.....	$1.50
Net price, each	.14

OPEN EYE SNAPS.



No. 435.

Size	½ inch eye
Net price, per doz.....	$0.50
Net price, each	.05

SNAP AND THIMBLE.

Sizes	Net price each
½ inch Thimble, 5/8 inch Snap.....	$0.10
½ inch Thimble, 3/4 inch Snap.....	.10

Sizes	Net price per doz.
½ inch Thimble, 5/8 inch Snap.....	$0.80
½ inch Thimble, 3/4 inch Snap.....	.80

STUMP JOINT RIVETS.

BEVEL HEADS.

Size	Net price per doz.	Net price per 100
¼ in. diam.	$0.12	$0.90

OVAL HEAD AND WAGON BOX RIVETS.

Oval Head. Wagon Box Head.

Sizes in Stock from	Net price per lb.
½ in. to 4 in. x 3/16 in. Oval or Wagon Box Head	$0.06
¾ in. to 4 in. x ¼ in. Oval or Wagon Box Head	.05½

BOW SOCKET AND WHEEL RIVETS.

Bow Socket. Wheel Head.

All sizes, net price per lb. $0.07½

BLACKSMITHS' APRON.

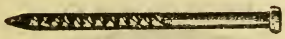
Leather.

Sizes	Net price each
No. 1, 28x38 in.	$1.60
No. 2, 26x24 in.	1.50

Sheep Skin.

Sizes	Net price each
No. 1	$1.30
No. 2	1.20

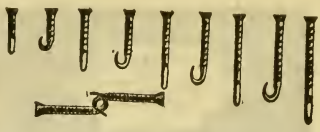
WIRE BRADS.



In 1-pound papers.

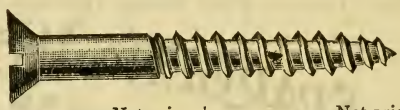
Size	Net price per paper	Size	Net price per paper
¾ in. No. 17	$0.10	1½ in. No. 14	$0.06
¾ in. No. 18	.11	1½ in. No. 15	.07
⅞ in. No. 17	.09	1¾ in. No. 13	.06
⅞ in. No. 18	.09	1¾ in. No. 14	.06
1 in. No. 16	.08	2 in. No. 12	.06
1 in. No. 17	.08	2 in. No. 13	.06
1¼ in. No. 14	.07	2½ in. No. 11	.06
1¼ in. No. 15	.07	2½ in. No. 12	.06

WIRE CLINCHING NAILS.



Sizes	Net price per paper
4-8 and shorter	$0.05
4½-8 and longer	.05

WOOD SCREWS.



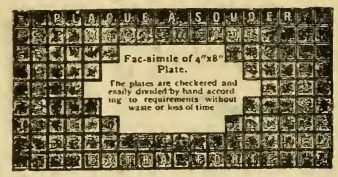
Sizes	Net price per gross	Sizes	Net price per gross
¼ in. No. 3	$0.11	1¼ in. No. 11	$0.21
⅜ in. No. 3	.11	1¼ in. No. 12	.23
⅜ in. No. 4	.11	1¼ in. No. 13	.26
⅜ in. No. 5	.12	1¼ in. No. 14	.29
⅜ in. No. 6	.12	1¼ in. No. 15	.32
⅜ in. No. 7	.13	1¼ in. No. 16	.38
⅜ in. No. 8	.13	1¼ in. No. 18	.50
½ in. No. 2	.11	1½ in. No. 7	.18
½ in. No. 3	.11	1½ in. No. 8	.20
½ in. No. 4	.11	1½ in. No. 9	.21
½ in. No. 5	.12	1½ in. No. 10	.21
½ in. No. 6	.12	1½ in. No. 12	.25
½ in. No. 7	.13	1½ in. No. 13	.27
⅝ in. No. 3	.11	1½ in. No. 14	.30
⅝ in. No. 4	.11	1½ in. No. 15	.35
⅝ in. No. 5	.12	1½ in. No. 16	.42
⅝ in. No. 6	.12	1¾ in. No. 8	.23
⅝ in. No. 7	.13	1¾ in. No. 9	.24
⅝ in. No. 8	.14	1¾ in. No. 10	.24
¾ in. No. 4	.11	1¾ in. No. 12	.27
¾ in. No. 5	.12	1¾ in. No. 13	.30
¾ in. No. 6	.13	1¾ in. No. 14	.34
¾ in. No. 7	.14	1¾ in. No. 15	.39
¾ in. No. 8	.14	1¾ in. No. 16	.45
¾ in. No. 9	.15	2 in. No. 9	.25
¾ in. No. 10	.17	2 in. No. 10	.27
⅞ in. No. 5	.13	2 in. No. 11	.28
⅞ in. No. 6	.14	2 in. No. 12	.30
⅞ in. No. 7	.14	2 in. No. 14	.37
⅞ in. No. 8	.15	2 in. No. 16	.47
⅞ in. No. 9	.16	2 in. No. 18	.63
⅞ in. No. 10	.17	2¼ in. No. 11	.31
1 in. No. 5	.13	2¼ in. No. 12	.33
1 in. No. 6	.14	2¼ in. No. 14	.40
1 in. No. 7	.15	2¼ in. No. 15	.47
1 in. No. 8	.16	2½ in. No. 11	.38
1 in. No. 9	.17	2½ in. No. 12	.39
1 in. No. 10	.18	2½ in. No. 13	.41
1 in. No. 11	.20	2½ in. No. 14	.44
1 in. No. 12	.21	2½ in. No. 15	.50
1 in. No. 13	.24	2½ in. No. 16	.55
1 in. No. 14	.26	3 in. No. 14	.53
1¼ in. No. 7	.17	3 in. No. 16	.63
1¼ in. No. 8	.17	3 in. No. 18	.83
1¼ in. No. 9	.18	4 in. No. 16	.98
1¼ in. No. 10	.20	4 in. No. 18	1.14
		4½ in. No. 18	1.37

SILO LUGS

For Round Iron Hoops.

Sizes	Net price each
⅝ inch	$0.10
¾ inch	.12

LAFFITTE WELDING PLATES.



LOWER YOUR COSTS—IMPROVE YOUR WORK.

These plates are used in the simplest possible manner, the two pieces being heated to a cherry red if steel, or a white heat if iron. A piece of Laffitte Plate of sufficient size is then placed between the parts to be welded, then press them together until the Plate fuses, hammer tightly and complete by hammering in the usual way. The piece may be reheated to any desired heat without endangering the weld.

Sizes.	Each	Net price per box
Light Plates for Light Forging, 10 plates in a box	$0.12	$1.00
Heavy Plates for Heavy Forging, 10 plates in a box	.15	1.25

Guaranteed equal to Borax, and superior to many welding compounds. Will work on iron or steel. PRICE ABOUT ONE-HALF. TRY A SAMPLE.

Net price per 1 lb. $0.05
Net price per 5 lbs. ..... .20

CHERRY HEAT WELDING COMPOUND.

Note—This Compound is regularly used by thousands of Carriage Makers, Knife and Shear Manufacturers, Machinists, Manufacturers of Shovels, and Agricultural Implements, etc., all over the United States. Some of the largest consumers have been using it for some twenty years, having in the meantime tried every new compound which has been put upon the market. They try others, but they buy "Cherry Heat."

Cherry Heat Welding Compound, net price, per 1 lb. $0.15
Net price, per 5 lbs. ..... .55

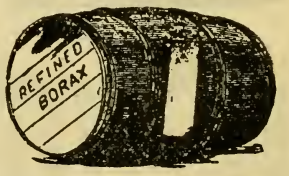
CLIMAX WELDING COMPOUND.

Climax Welding Compound, net price per 1 lb. $0.12
Net price per 5 lbs. ..... .50

It does not have to be applied between the lap, like other compounds, but is used the same as borax. It is also far superior to common borax.

Net price per 1 lb. $0.12
Net price per 5 lbs. ..... .50

REFINED BORAX.



Net price per 1 lb. $0.12
Net price per 5 lbs. ..... .50

COMMON CARRIAGE BOLTS.

Full Size Shank.

Cut Threads.

Lgth.	3/16 & 1/4 in. Price Each	Price Doz.	Price 100	5/16 Price Each	Price Doz.	Price 100	3/8 Price Each	Price Doz.	Price 100	7/16 Price Each	Price Doz.	Price 100	1/2 Price Each	Price Doz.	Price 100
1	$0.01	$0.05	$0.25	$0.01	$0.07	$0.36	$0.01	$0.10	$0.49	$0.02	$0.15	$0.75	$....	$....	$....
1¼	.01	.05	.25	.01	.07	.36	.01	.10	.49	...	...	...	...	...	...
1½	.01	.05	.25	.01	.07	.36	.01	.10	.49	.02	.15	.75	.02	.15	1.03
1¾	.01	.05	.26	.01	.07	.37	.01	.10	.51	...	...	...	...	...	...
2	.01	.05	.27	.01	.07	.38	.01	.10	.52	.02	.15	.81	.02	.15	1.03
2¼	.01	.05	.28	.01	.08	.39	.02	.15	.54	...	...	...	...	...	...
2½	.01	.05	.29	.01	.08	.41	.02	.15	.56	.02	.15	.87	.02	.15	1.03
2¾	.01	.05	.30	.01	.08	.42	.02	.15	.58	...	...	...	...	...	...
3	.01	.06	.32	.01	.09	.44	.02	.15	.60	.02	.20	.94	.02	.20	1.09
3¼	.01	.06	.33	.01	.09	.45	.02	.15	.62	...	...	...	...	...	...
3½	.01	.06	.34	.01	.09	.47	.02	.15	.65	.02	.20	1.00	.02	.20	1.18
3¾	.01	.06	.35	.01	.09	.49	.02	.15	.67	...	...	...	...	...	...
4	.01	.07	.35	.01½	.10	.51	.02	.15	.69	.02	.20	1.06	.03	.25	1.25
4¼	.01	.07	.36	.01½	.10	.53	.02	.15	.71	...	...	...	...	...	...
4½	.01	.07	.37	.01½	.10	.55	.02	.15	.74	.02	.20	1.12	.03	.25	1.33
4¾	.01	.07	.38	.01½	.10	.56	.02	.15	.77	...	...	...	...	...	...
5	.01	.08	.39	.02	.15	.57	.02	.15	.79	.02	.20	1.18	.03	.25	1.40
5¼	.01	.08	.40	.02	.15	.58	.02	.15	.81	...	...	...	...	...	...
5½	.01	.08	.41	.02	.15	.59	.02	.15	.82	.03	.25	1.25	.03	.25	1.48
5¾	.01	.08	.42	.02	.15	.61	.02	.15	.84	...	...	...	...	...	...
6	.01	.08	.43	.02	.15	.63	.02	.15	.85	.03	.25	1.31	.04	.30	1.55
6½	...	...	...	.02	.15	.66	.02	.20	1.15	.03	.25	1.37	...	...	1.62
7	...	...	...	.02	.15	.69	.02	.20	1.21	.03	.25	1.43	.04	.30	1.70
7½	...	...	...	.02	.15	.72	.03	.25	1.26	...	...	...	.04	.30	1.78
8	...	...	...	.02	.15	.75	.03	.25	1.32	...	...	...	.04	.30	1.86
8½	...	...	...	...	...	...	.03	.25	1.37	...	...	...	.04	.35	1.93
9	...	...	...	...	...	...	.03	.25	1.42	...	...	...	.04	.35	2.00
9½	...	...	...	...	...	...	.03	.25	1.47	...	...	...	.04	.35	2.08
10	...	...	...	...	...	...	.03	.25	1.53	...	...	...	.04	.35	2.16
10½	...	...	...	...	...	...	...	...	...	...	...	...	.05	.40	2.23
11	...	...	...	...	...	...	...	...	...	...	...	...	.05	.40	2.30
11½	...	...	...	...	...	...	...	...	...	...	...	...	.05	.40	2.38
12	...	...	...	...	...	...	...	...	...	...	...	...	.05	.45	2.45
12½	...	...	...	...	...	...	...	...	...	...	...	...	.05	.45	2.53
13	...	...	...	...	...	...	...	...	...	...	...	...	.05	.45	2.61
13½	...	...	...	...	...	...	...	...	...	...	...	...	.05	.50	2.68
14	...	...	...	...	...	...	...	...	...	...	...	...	.05	.50	2.75
14½	...	...	...	...	...	...	...	...	...	...	...	...	.05	.50	2.83
15	...	...	...	...	...	...	...	...	...	...	...	...	.05	.50	2.91

Note.—3/16 and 1/4 in. bolts are packed 100 in a package. 5/16 in. and larger 50 in a package. We keep cut thread bolts only. Nothing less than a package at 100 price.

PHILADELPHIA CARRIAGE BOLTS.

Oval Turned Heads. Full Square Necks.

Hot Forged Nuts and Cut Threads.

Lgth.	3/16 & 1/4 Price Each	Price Doz.	Price 100	5/16 Price Each	Price Doz.	Price 100	3/8 Price Each	Price Doz.	Price 100
1	$0.02	$0.15	$0.68	$0.02	$0.18	$0.88	$0.02	$0.20	$1.19
1¼	.02	.15	.70	.02	.18	.89	.02	.20	1.20
1½	.02	.15	.72	.02	.18	.90	.02	.20	1.21
1¾	.02	.15	.75	.02	.18	.91	.02	.20	1.22
2	.02	.15	.77	.02	.18	.93	.02	.20	1.23
2¼	.02	.15	.79	.02	.18	.95	.03	.25	1.26
2½	.02	.15	.81	.02	.18	.99	.03	.25	1.31
2¾	.02	.15	.84	.02	.18	1.02	.03	.25	1.35
3	.02	.18	.86	.03	.20	1.06	.03	.25	1.40
3¼	.02	.18	.88	.03	.20	1.11	.03	.25	1.46
3½	.02	.18	.90	.03	.20	1.13	.03	.25	1.51
3¾	.02	.18	.93	.03	.20	1.17	.03	.25	1.55
4	.02	.18	.95	.03	.20	1.20	.04	.30	1.60
4½	.02	.18	1.02	.03	.25	1.29	.04	.30	1.70
5	.03	.20	1.08	.03	.25	1.35	.04	.30	1.78
5½	...	...	...	.03	.25	1.42	.04	.35	1.89
6	...	...	...	.03	.25	1.49	.04	.35	1.98

NORTH CARRIAGE BOLTS.

Corrugated Neck.

Net price per 100.

Length.	3/16 & 1/4	5/16	3/8
1 to 1½	$0.26	$0.37	$0.51
1¾	.27	.37	.54
2	.28	.40	.54
2¼	.30	.42	.56
2½	.31	.43	.58
2¾	.32	.44	.61
3	.33	.46	.63
3¼	.34	.48	.67
3½	.36	.49	.69
3¾	.37	.52	.72
4	.38	.54	.74
4¼	.39	.56	.75
4½	.40	.58	.79
4¾	.41	.59	.82
5	.42	.60	.84
5½	.43	.63	.86
6	.46	.66	.91

North Carriage Bolts have ribbed on Corrugated Neck.

We do not break packages of above bolts.

CONE HEAD SPRING BAR BOLTS.

Sizes. Net price per doz.

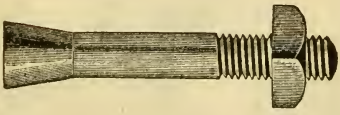
5/16x2½ Steeple Head $0.28

STEEPLE HEAD SPRING BAR BOLTS.

Sizes. Net price per doz.

5/16x2½ Cone Head $0.22

SLEIGH SHOE BOLTS.



Sizes.	Net price per doz.	per 100.
⅜x4 inch	$0.10	$0.77
⅜x4½ inch	.10	.82
⅜x5 inch	.10	.86
⅜x5½ inch	.12	.91
⅜x6 inch	.12	.95
⅜x6½ inch	.15	1.26
⅜x7 inch	.18	1.31
⅜x7½ inch	.18	1.38

COMMON TIRE BOLTS.

Lgth.	3/16 Price doz.	3/16 Price 100.	1/4 Price doz.	1/4 Price 100.	5/16 Price doz.	5/16 Price 100.
1¼	$0.03	$0.12	$0.04	$0.22	$0.05	$0.32
1½	.03	.12	.04	.22	.05	.32
1¾	.03	.12	.04	.23	.05	.32
2	.03	.14	.04	.24	.05	.33
2¼	.04	.15	.04	.25	.05	.34
2½	.04	.17	.05	.26	.05	.36
2¾	.04	.17	.05	.27	.05	.38
3	...	.18	.05	.28	.06	.40
3¼	...	...	.05	.29	.06	.41
3½	...	...	.05	.30	.06	.42
3¾	...	...	.05	.31	.06	.44
4	...	...	.05	.32	.06	.46
4¼	...	...	...	...	...	.48
4½	...	...	...	...	...	.50

"T" HEAD SHAFT AND WHIFFLE-TREE BOLTS.

Net price per 100.

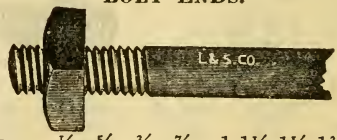
Length.	3/16	1/4	5/16	3/8
1¼	$1.25	$1.25	$2.50	$2.75
1½	1.25	1.25	2.50	2.75
1¾	1.25	1.25	2.50	2.75
2	1.25	1.25	2.50	2.75
2¼	1.25	1.25	2.50	2.75
2½	....	....	2.50	2.75
3	....	....	2.50	2.75
3½	....	....	2.50	2.75
4	....	....	2.50	2.75
4¼	....	....	2.50	2.75

Net price per doz.

3/16 and 1/4 inch.....16c

5/16 and 3/8 inch.....22c

BOLT ENDS.



Sizes	½	⅝	¾	⅞	1	1⅛	1¼	1⅜	1½
Length ..	8	9	10	11	12	13	14	15	16
Net price each ...	2½	4	5	7½	11	15	22	35	37

SHAFT SHACKLE BOLTS.

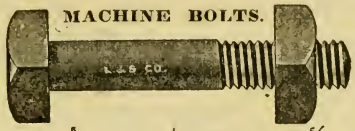
Sizes. Net price per doz.

⅜x2¼ inch 20c

7/16x2½ inch 20c

MACHINE BOLTS.

Square Head.



Cut Thread.

Lgth.	Price Each	¼ Price Doz.	Price 100	Price Each	5/16 Price Doz.	Price 100
1	$0.01	$0.08	$0.41	$0.01	$0.09	$0.49
1½	.01	.08	.41	.01	.09	.49
2	.01	.08	.43	.01	.10	.51
2½	.01	.09	.45	.01	.10	.54
3	.01	.09	.47	.01	.10	.56
3½	.01	.09	.49	.02	.15	.60
4	.01	.10	.51	.02	.15	.63
4½	.02	.15	.65	.02	.15	.81
5	.02	.15	.68	.02	.15	.85
5½	.02	.15	.71	.02	.20	.89
6	.02	.15	.75	.02	.20	.93
		⅜			½	
1	$0.02	$0.15	$0.58	$....	$....	$....
1½	.02	.15	.58	.02	.20	1.19
2	.02	.15	.62	.03	.25	1.27
2½	.02	.15	.66	.03	.25	1.36
3	.02	.15	.70	.03	.25	1.41
3½	.02	.15	.74	.04	.30	1.58
4	.02	.15	.78	.04	.30	1.62
4½	.02	.20	1.11	.04	.30	1.71
5	.02	.20	1.16	.04	.30	1.79
5½	.02	.20	1.22	.04	.30	1.83
6	.03	.25	1.24	.04	.35	1.97
6½	.03	.25	1.32	.04	.35	2.05
7	.03	.25	1.37	.05	.40	2.14
7½	.03	.25	1.41	.05	.40	2.23
8	.03	.25	1.48	05	.40	2.31
8½	...	...	...	.05	.40	2.40
9	...	...	...	.05	.45	2.49
9½	...	...	...	.05	.45	2.58
10	...	...	...	.05	.45	2.66
10½	...	...	...	.05	.50	2.75
11	...	...	...	.05	.50	2.83
11½	...	...	...	.05	.50	2.92
12	...	...	...	.05	.50	3.01
13	...	...	...	.05	.50	3.18
14	...	...	...	.06	.55	3.35
15	...	...	...	.06	.55	3.53

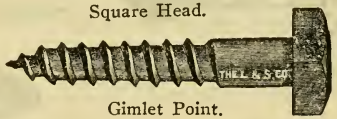
In packages of 50. Nothing less than package at 100 price.

Lgth.	Price Each	⅝ Price Doz.	Price 100	Price Each	¾ Price Doz.	Price 100
1	$....	$....	$....	$....	$....	$....
1½	.04	.30	1.72	...	...	...
2	.04	.30	1.85	.05	.45	2.55
2½	.04	.35	1.97	.05	.50	2.73
3	.04	.35	2.10	.05	.50	2.89
3½	.05	.40	2.23	.05	.50	3.05
4	.05	.40	2.35	.06	.55	3.23
4½	.05	.45	2.48	.06	.55	3.39
5	.05	.45	2.61	.06	.55	3.56
5½	.05	.50	2.73	.06	.60	3.73
6	.05	.50	2.87	.06	.60	3.89
6½	.05	.50	2.99	.06	.60	4.05
7	.05	.50	3.11	.06	.60	4.23
7½	.06	.55	3.25	.06	.60	4.39
8	.06	.55	3.37	.07	.65	4.56
8½	.06	.55	3.50	.07	.65	4.76
9	.06	.55	3.63	.07	.65	4.89
9½	.06	.60	3.76	.07	.70	5.06
10	.06	.60	3.88	.07	.70	5.23
10½	.06	.60	4.01	.07	.70	5.40
11	.06	.60	4.13	.08	.75	5.56
11½	.06	.60	4.25	.08	.75	5.73
12	.06	.60	4.36	.08	.80	5.89
13	.07	.65	4.63	.08	.80	6.23
14	.07	.65	4.89	.08	.85	6.56
15	.07	.70	5.14	.09	.90	6.89
16	.07	.70	5.39	.09	.95	7.23
17	.08	.75	5.65	.10	1.00	7.55
18	.08	.80	5.94	.10	1.05	7.89
19	.08	.80	6.16	.11	1.10	8.43
20	.08	.85	6.40	.11	1.10	8.55

In packages of 50. Nothing less than package at 100 price.

COACH SCREWS.

Square Head.



Gimlet Point.

Square Head—Gimlet Point.

Lgth.	Price Each	5/16 Price Doz.	Price 100	Price Each	⅜ Price Doz.	Price 100	Price Each	½ Price Doz.	Price 100	Price Each	⅝ Price Doz.	Price 100	Price Each	¾ Price Doz.	Price 100
1½	$0.01	$0.10	$0.55	$0.02	$0.15	$0.66	$0.02	$0.18	$0.90	$....	$....	$....	$....	$....	$....
2	.01	.10	.56	.02	.15	.72	.02	.18	.99	...	...	...	...	...	...
2½	.02	.15	.62	.02	.15	.78	.02	.20	1.06	...	...	...	...	...	...
3	.02	.15	.68	.02	.15	.85	.02	.20	1.15	.03	.25	1.42	...	...	...
3½	.02	.15	.74	.02	.20	.89	.02	.20	1.22	.04	.30	1.54	...	...	...
4	.02	.15	.77	.02	.20	.94	.03	.25	1.32	.04	.30	1.66	...	...	...
4½	.02	.15	.83	.02	.20	1.01	.03	.25	1.40	.04	.30	1.78	...	...	...
5	.02	.20	.87	.02	.20	1.09	.04	.30	1.50	.04	.30	1.89	.05	.50	2.70
5½	.02	.20	.93	.02	.20	1.13	.04	.30	1.57	.04	.35	2.06	.05	.50	2.89
6	.02	.20	.98	.02	.20	1.19	.04	.30	1.69	.04	.35	2.13	.05	.50	3.03
6½	...	...	...	...	...	...	.04	.30	1.74	.05	.40	2.27	.06	.55	3.22
7	...	...	...	...	...	...	.04	.30	1.85	.05	.40	2.37	.06	.55	3.37
7½	...	...	...	...	...	...	.04	.35	1.91	.05	.45	2.50	.06	.55	3.56
8	...	...	...	...	...	...	.04	.35	2.02	.05	.45	2.61	.06	.60	3.70
8½	...	...	...	...	...	...	.05	.40	2.11	.05	.50	2.73	.06	.60	3.87
9	...	...	...	...	...	...	.05	.40	2.17	.05	.50	2.84	.06	.60	4.03
9½	...	...	...	...	...	...	.05	.40	2.27	.05	.50	2.97	.06	.60	4.20
10	...	...	...	...	...	...	.05	.40	2.33	.05	.50	3.08	.06	.60	4.36
10½	...	...	...	...	...	...	.05	.45	2.44	.06	.55	3.20	.07	.65	4.54
11	...	...	...	...	...	...	.05	.45	2.51	.06	.55	3.33	.07	.65	4.70
11½	...	...	...	...	...	...	.05	.45	2.61	.06	.55	3.44	.07	.65	4.88
12	...	...	...	...	...	...	.05	.45	2.70	.06	.55	3.56	.07	.70	5.03

SKEIN SCREWS.

½ inch, per set of 4....$0.09 ¾ inch, in set of 4.....$0.16 ⅝ inch, per set of 4..... .12

DASH BOLTS.

Concealed Head.

Sizes.	Net price per doz.
1¼x5/16 inch	$0.25

BASTARD HEAD BOLTS.

Net price per 100.

Length.	3/16	¼	5/16
1	$0.66	$0.66	$0.88
1¼	.68	.68	.88
1½	.70	.70	.88
1¾	.73	.73	.88
2	.75	.75	.90
2¼	.77	.77	.92
2½	.79	.79	.96
2¾	.81	.81	.99
3	.84	.84	1.02

SPRING BOLTS.

Sizes.	Net price per doz.
2 x5/16	$0.18

STOVE BOLTS.

Flat Head.

Net price per 100.

Length.	3/16	¼	5/16
½	$0.15	$0.22	
⅝	.15	.22	
¾	.15	.22	$0.31
⅞	.16	.23	.31
1	.16	.23	.33
1¼	.18	.25	.35
1½	.20	.27	.37
1¾	.21	.28	.39
2	.22	.29	.41
2¼	.29	.35	.44
2½	.32	.38	.50
2¾	.35	.45	.55
3	.40	.50	.67

STOVE BOLTS.

Round Head.

Net price per 100.

Length.	3/16	¼	5/16
½	$0.16		
⅝	.16		
¾	.16	$0.23	$0.32
⅞	.17	.24	.33
1	.17	.24	.34
1¼	.19	.24	.36
1½	.21	.28	.38
1¾	.22	.29	.40
2	.23	.30	.42
2¼	.27	.35	.49
2½	.32	.40	.54
2¾	.36	.45	.60
3	.40	.50	.65

WROUGHT IRON TURN BUCKLES.

With Right and Left Hand Stub Bolt Ends

Sizes.	Net price each.
½ inch	$0.22
⅝ inch	.24
¾ inch	.30
⅞ inch	.36
1 inch	.42
1⅛ inch	.48
1¼ inch	.60
1⅜ inch	.70

WROUGHT WASHERS.

Sizes for	Net price per lb.
3/16 inch Bolt	$0.10
¼ inch Bolt	.08½
5/16 inch Bolt	.07½
⅜ inch Bolt	.07
⅞ inch Bolt	.05½
½ inch Bolt	.04½
⅝ inch Bolt	.04
¾ inch Bolt	.03½
⅞ inch Bolt	.03½
1 inch Bolt	.03½

TIRE BOLT WASHERS.

3/16 inch. ¼ inch.

Size.	Net price per lb.
3/16 inch	$0.10
¼ inch	.09

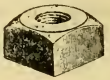
SQUARE NUTS.

Sizes for	Net price per lb.
¼ inch Bolt	$0.09½
5/16 inch Bolt	.08
⅜ inch Bolt	.06
7/16 inch Bolt	.05½
½ inch Bolt	.04½
9/16 inch Bolt	.04½
⅜ inch Bolt	.04
¾ inch Bolt	.04
⅞ inch Bolt	.04
1 inch Bolt	.04

HEXAGON NUTS.

Sizes for	Net price per lb.
5/16 inch Bolt	$0.12
⅜ inch Bolt	.10
7/16 inch Bolt	.08½
½ inch Bolt	.07½
9/16 inch Bolt	.07½
⅝ inch Bolt	.06½
¾ inch Bolt	.05½
⅞ inch Bolt	.05½
1 inch Bolt	.05½

TAPPED SQUARE NUTS.



Sizes for	Net price per lb.
¼ inch Bolt	$0.12½
5/16 inch Bolt	.11½
⅜ inch Bolt	.09
7/16 inch Bolt	.08
½ inch Bolt	.06½
⅝ inch Bolt	.06
¾ inch Bolt	.05
⅞ inch Bolt	.05
1 inch Bolt	.05

CAST IRON WASHERS.

Sizes for	Net price per lb.
⅝, ¾, ⅞ and 1 inch diameter	$0.04

DOUBLE ENDER FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
No. 7	$0.08	$0.84	No. 9	$0.10	$1.05
No. 8	.09	.94	No. 10	.12	1.16

SLIM TAPER FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
3 inch	$0.05	$0.51	6 inch	$0.09	$0.76
3½ inch	.05	.51	7 inch	.10	.91
4 inch	.06	.53	8 inch	.12	1.08
4½ inch	.06	.57			
5 inch	.07	.62			
5½ inch	.08	.70			

REGULAR TAPER FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
3 inch	$0.05	$0.51	6 inch	$0.09	$0.81
3½ inch	.05	.51	7 inch	.10	1.03
4 inch	.06	.53	8 inch	.12	1.30
4½ inch	.06	.57	9 inch	.15	1.57
5 inch	.07	.60	10 inch	.20	1.52
5½ inch	.08	.72			

MILL BASTARD FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
5 inch	$0.08	$0.80	10 inch	$0.14	$1.33
6 inch	.09	.88	12 inch	.18	1.75
7 inch	.10	1.03	14 inch	.25	2.30
8 inch	.10	1.08	16 inch	.30	3.22

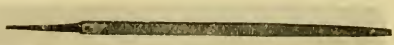
FLAT BASTARD FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
4 inch	$0.09	$0.90	10 inch	$0.17	$1.67
5 inch	.10	.94	12 inch	.22	2.31
6 inch	.12	1.03	14 inch	.30	3.16
8 inch	.15	1.27	16 inch	.40	4.23

ROUND BASTARD FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
4 inch	$0.07	$0.72	10 inch	$0.14	$1.33
5 inch	.08	.76	12 inch	.18	1.75
6 inch	.08	.84	14 inch	.25	2.30
8 inch	.10	1.03	16 inch	.30	3.50

SQUARE BASTARD FILES.



Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
4 inch	$0.10	$0.95	10 inch	$0.17	$1.76
5 inch	.10	1.00	12 inch	.23	2.43
6 inch	.12	1.15	14 inch	.35	3.31
8 inch	.13	1.38	16 inch	.40	4.45

HALF ROUND BASTARD FILES.

Sizes.	Net price each.	Net price doz.	Sizes.	Net price each.	Net price doz.
6 inch	$0.15	$1.45	12 inch	$0.27	$2.70
8 inch	.20	1.80	14 inch	.25	3.50
10 inch	.25	2.17	16 inch	.45	4.70

FLAT WOOD RASPS.

Sizes.	Net price each.	Sizes.	Net price each.
8 inch	$0.25	12 inch	$0.35
10 inch	.30	14 inch	.40

HALF ROUND WOOD RASPS.

Sizes.	Net price each.	Sizes.	Net price each.
8 inch	$0.25	12 inch	$0.35
10 inch	.30	14 inch	.45

THE "PEELER" RASP.

For Horseshoers and Wagonmakers.

The only radical improvement in tools for shoeing horses in 100 years.

Of saw steel, with interchangeable cutting plates, which may be resharpened as many times as a saw. The teeth are gouge-shaped and make a clean, continuous cut without clogging. Superior to all other tools used for the purpose, as regards ease, safety and durability.

Sizes.	Net price each.
One "Peeler" rasp and file	$0.75
New plates	.35
File for sharpening the plates	.15

HORSE RASPS.

CORRY RASPS.

Sizes.	Net price per doz.	Price each.
14 inch	$2.80	$0.25
15 inch	3.25	.30
16 inch	4.40	.40
18 inch slim	4.40	.40

Note.—A good Rasp.

BARLOW RASPS.

Sizes.	Net price per doz. (Plain.)	Price Each Plain.	Price Each Tanged.
14 inch	$3.60	$0.35	$0.45
15 inch	4.25	.40	.50
16 inch	4.75	.45	.55
18 inch slim	4.75	.45	...

Note.—Equal to any made.

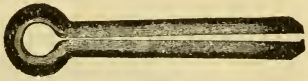
HELLER & BROS. HORSE RASPS.

Sizes.	Net price per doz. (Plain.)	Price Each Plain.	Price Each Tanged.
14 inch	$4.55	$0.45	$0.55
15 inch	5.35	.50	.60
16 inch	6.25	.55	.65

BLACK DIAMOND.

Sizes.	Net price per doz. (Plain.)	Price Each Plain.	Price Each Tanged.
14 inch	$5.25	$0.45	$0.55
15 inch	5.75	.50	.60
16 inch	6.35	.55	.65

SPRING COTTERS.

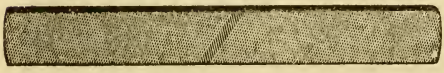


Sizes. Net price per box.
⅛ to $\frac{5}{16}$ diam. by 1¼ to 2½ in. long....$0.42
Assorted 100 in a box.

HORSE TOOTH RASPS.

No. 4.
Heller Bros. Adjustable Jointed.
Net price each $1.05
Extra floats ..... .18

INCISOR TOOTH FILE.



Net price each.
10 inches long $0.35

BENT INCISOR TOOTH FILE.

Net price each.
Quarter Rasp, 13 inches long.....$0.50

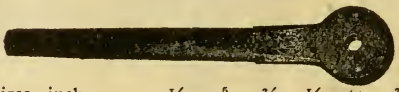
HELLER'S PRITCHELS.

Net price each.
Length 12 inches $0.17

HELLER'S SOLE KNIVES.

Net price each $0.28

HEADING TOOLS.



Sizes, inch	¼	$\frac{5}{16}$	⅜	½	⅝	¾
Net price each	$0.15	.15	.15	.15	.15	.15

HAND COLD CHISELS.

Sizes, inch	⅜	½	⅝	¾	⅞	1
Net price each	$0.10	.15	.20	.30	.35	.45

PLOW ANVILS. ROUND FLATTERS

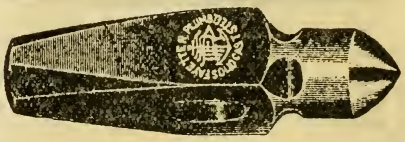
PLOW ANVILS.

Sizes, lbs. 4½
Net price each $0.45

ROUND FLATTERS.

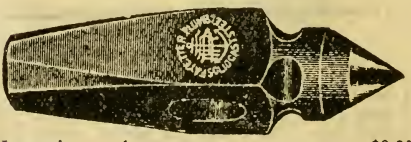
Size, inches	2	2½	3
Net price each	$0.30	.36	.60

COUNTERSINKS.



Net price each $0.25

CENTER PUNCHES.



Net price each $0.30

HARDIES.

Sizes. inch shank	⅞	1
Net price each	$0.23	$0.28

HOT CUTTERS.

Sizes, inches	1¼	1⅜	1½
Net price each	$0.32	.33	.41

COLD CUTTERS.

Sizes, inches	1¼	1⅜	1½
Net price each	$0.28	.38	.47

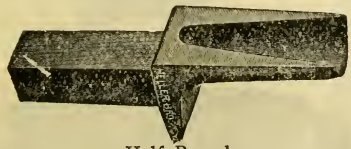
SET HAMMERS.

Sizes, inches	1¼	1½	1¾	2
Net price each	$0.30	.44	.60	.84

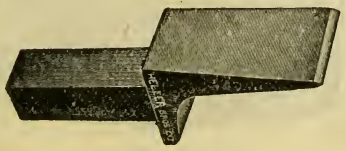
FLATTERS.

Sizes, inches	2	2¼	2½	2¾	3
Net price each	$0.35	.42	.57	.62	.80

BLACKSMITHS' HARDIES.



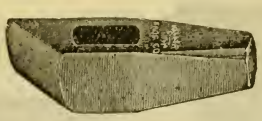
Half Round.



Straight.

Sizes.	Net price each.
Half Round, ⅞ and 1 inch Shank	$0.44
Straight, ⅞ and 1 inch Shank	.30

CREASERS.



Net price each.

Creasers $0.28

FORE PUNCH.

Net price each.

Fore Punches $0.25

SQUARE PUNCH.

Sizes, inches	⅜	½	⅝	¾
Net price each	$0.24	.28	.28	.28

ROUND PUNCH.

Sizes, inches	⅜	½	⅝	¾
Net price each	$0.30	.31	.38	.38

BUFFERS.

Net price each $0.28

BOTTOM FULLER. TOP FULLER.

Shanks ⅞ and 1 inch.
BOTTOM FULLER.

Sizes.	Net price each.
¼ inch	$0.36
5/16 inch	.37
⅜ inch	.39
7/16 inch	.39
½ inch	.39
9/16 inch	.40
⅝ inch	.40
¾ inch	.42
⅞ inch	.45
1 inch	.50
1¼ inch	.55
1½ inch	.58

Sizes ¼ to 1 inch.
TOP FULLER.

Sizes.	Net price each.
¼ inch	$0.43
5/16 inch	.44
⅜ inch	.46
7/16 inch	.47
½ inch	.48
9/16 inch	.48
⅝ inch	.48
¾ inch	.48
⅞ inch	.54
1 inch	.59
1¼ inch	.63
1½ inch	.67

TOP SWAGE.

BOTTOM SWAGE.

Shank ⅞ and 1 inch.

BOTTOM SWAGES.

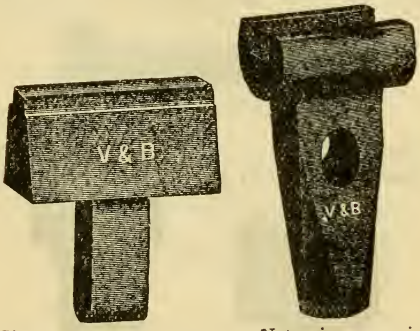
Sizes.	Net price each
¼ inch	35c
5/16 inch	35c
⅜ inch	35c
7/16 inch	36c
½ inch	41c
9/16 inch	42c
⅝ inch	42c
¾ inch	43c
⅞ inch	46c
1 inch	46c
1¼ inch	53c
1½ inch	55c

Sizes ¼ to 2 inch

TOP SWAGES.

Sizes.	Net price each
¼ inch	30c
5/16 inch	32c
⅜ inch	40c
7/16 inch	41c
½ inch	41c
9/16 inch	41c
⅝ inch	41c
¾ inch	45c
⅞ inch	48c
1 inch	48c
1¼ inch	48c
1½ inch	75c

ANVIL SWAGES FOR CHANNEL TIRE.



Size.	Net price per pair
¾ inch	$1.75
⅞ inch	1.75
1 inch	1.75
1⅛ inch	1.95
1¼ inch	1.95
1⅜ inch	2.25
1½ inch	2.25
1⅝ inch	2.60
1¾ inch	2.60

BLACKSMITHS' HAND HAMMER.

Sizes, lbs.	2	2½	3	4	4½
Net price each	$0.25	.25	.28	.38	.40

MASONS' HAMMER.

Sizes.	Net price per lb.
3 lbs.	12c
3 to 5 lbs.	11c
5 lbs. and over	10c

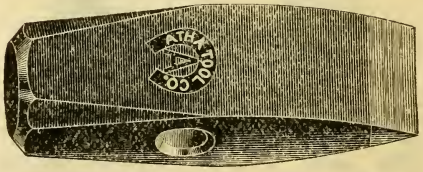
Axe finish. Each in a box.

BLACKSMITHS' SOLID STEEL SLEDGES.

Cross Pein.

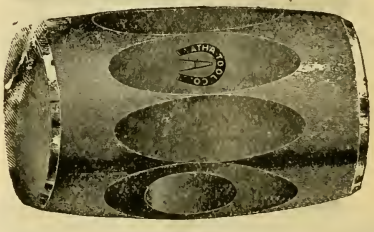
Sizes, lbs.	6	8	10	12	14	16
Net price each	$0.36	.48	.60	.72	.84	.96

STONE SLEDGES.



Sizes.	Net price per lb.
6 to 20 lbs	6c

SHOERS' TURNING SLEDGES.



Octagon Pattern.

Sizes, lbs.	6	7	8	9	10
Net price each	$0.54	.63	.72	.81	.90

SPIKE MAUL.

Sizes, lbs.	5	5½	6
Net price each	40c	45c	50c

STRIKING HAMMER.

Sizes.	Net price per lb.
3 to 5 lbs	8c
5 lbs. and over	6c

BLACKSMITHS' ANVILS.

From 90 to 200 lbs. in Stock.

	Net price per lb.
American Wrought Iron Steel Face	9½c
Swedish Solid Steel	9½c
Peter Wright, Steel Face	11½c
Trenton Anvils	9½c

FARRIERS' CLIP HORN ANVILS.

From 100 to 150 lbs. in Stock.

	Net price per lb.
American Wrought Iron Steel Face	10½c
Trenton Clip Horn	10½c
Peter Wright Steel Face	12½c

Note.—Every American Anvil is made of the best American Wrought Iron and faced with best Crucible Cast Steel. Top and bottom are each one solid piece and welded at waist.

Our Swedish Solid Steel Anvils are imported direct from Sweden, and they are the finest Anvils in the world. Both our American and Swedish anvils are warranted to be sound, to be free from flaws and to have faces hard and true.

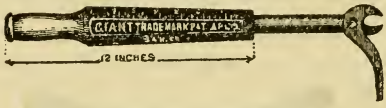
Our Peter Wright Anvils are imported direct from England, and are the finest Anvils in the world. We do not warrant Peter Wright Anvils.

SOLID STEEL SLEDGES.

Double Face.

Sizes, lbs.	6	8	10	12	14	16
Net price each	$0.36	.48	.60	.72	.84	.96

GENUINE GIANT NAIL PULLER.



No. 1.

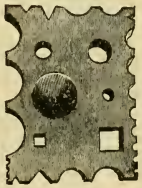
Net price each $1.25

LOCOMOTIVE JACK SCREW.

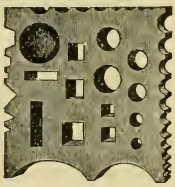
Diam. of Screw.	Height of Stand.	Lifting Capacity.	Net price each.
1¾ inch	10 inches	16 tons	$1.70
1¾ inch	12 inches	16 tons	1.88
1¾ inch	14 inches	16 tons	2.00
2 inch	12 inches	20 tons	2.15
2 inch	14 inches	20 tons	2.25
2 inch	16 inches	20 tons	2.65
2¼ inch	12 inches	24 tons	2.55
2¼ inch	14 inches	24 tons	2.80
2½ inch	12 inches	28 tons	3.00
2½ inch	14 inches	28 tons	3.40
2½ inch	16 inches	28 tons	3.80

BLACKSMITHS' SWAGE BLOCKS.

Shipped From Factory.



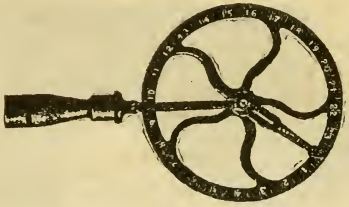
Shape of No. 1, 2 and 3.



Shape of No. 4 and 5

No.	Size.	Weight about	Net price per lb.
1	3⅝x10x14	100 lbs.	$0.03
2	3⅞x11x15	125 lbs.	.03
3	4⅛x11x15	145 lbs.	.03
4	4 x15x15	165 lbs.	.03
4½	4½x18x18	255 lbs.	.03
5	6 x24x24	625 lbs.	.03

TIRE MEASURING WHEEL.



Net price each

Little Giant $1.25

WOSTENHOLM'S FARRIERS KNIVES

Net price each

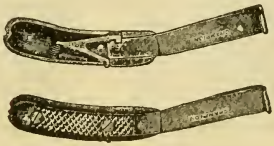
I. X. L. Wostenholm's Farriers' Knives.$0.35

POPE'S FARRIER'S KNIVES.

Net price each

Iron Handle, with one blade $0.30
Extra Blades ..... .25

THE "CHAMPION" FARRIER'S KNIFE.

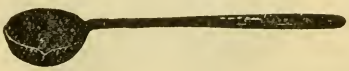


Net price, Handles and Three Blades...$0.85
Extra Blades, each ..... .20

In presenting this knife to the trade we take pleasure in saying that it is an improvement over all other knives, having many points of superiority that will be appreciated.

Each and every blade is strictly first-class, and are made from S. & C. Wardlow's best English Cast Steel, highly tempered to hold a good and lasting cutting edge.

MELTING LADLES.



Sizes	Net price each	Sizes	Net price each
3 inch Bowl...	$0.12	5 inch Bowl...	$0.25
4 inch Bowl...	.14	6 inch Bowl...	.30

BLACKSMITHS' MANDRELS.

Shipped from factory.

No.	Height.	Diam. at base.	Diam. at top.	Weight about	Net price per lb.
1	32 in.	8 in.	1 in.	55 lbs.	$0.04
1¼	40 in.	10 in.	1 in.	90 lbs.	.04
2	48 in.	12 in.	1 in.	115 lbs.	.04
3	52 in.	14 in.	1 in.	140 lbs.	.04
4	54 in.	16 in.	2 in.	200 lbs.	.04

BLACKSMITHS' SLOTTED MANDRELS.

Shipped from factory.

No.	Height.	Diam. at base.	Diam. at top.	Weight about	Net price per lb.
1	32 in.	8 in.	1 in.	60 lbs.	$0.04½
1½	40 in.	10 in.	1 in.	100 lbs.	.04½
2	48 in.	12 in.	1 in.	125 lbs.	.04½
3	52 in.	14 in.	1 in.	150 lbs.	.04½
4	54 in.	16 in.	2 in.	220 lbs.	.04½

The Cheney Patent Blacksmith Cone or Taper Mandrel is made with a slot running nearly the whole length, as shown in cut. This is very convenient for holding the ends of iron in bending rings, or when a ring with an eye-bolt is being made, the eye and bolt lie in this slot while the ring is being rounded up.

THE GENUINE EASY BOLT CLIPPER.

Sizes. Net price each.
No. 0 cuts $\frac{5}{16}$ inch or less $2.00
No. 1 cuts ⅜ inch or less 2.50
No. 2 cuts ½ inch or less 3.50
No. 3 cuts ⅝ inch or less 4.00

The "Easy" Bolt Clippers are made of the very best, material; jaws are of solid steel, properly tempered, and can be adjusted to take up the wear of the joints and cutting edges. Are fitted with rubber buffers between the handles to avoid any jar in the hands and wrist. Every clipper fully warranted.

ALLEN-RANDALL BOLT CLIPPER.

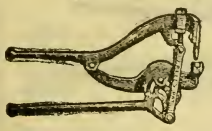
Sizes. Net price each.
No. 0 cuts up to $\frac{5}{16}$ inch $1.75
No. 1 cuts up to ⅜ inch 2.25
No. 2 cuts up to ½ inch 3.25
No. 3 cuts up to ⅝ inch 4.00
No. 4 cuts up to ¾ inch 5.00

This Clipper is without exception as good as made.

EASY HOOF TRIMMER.

Net price each $1.50
Extra blades 15c each.
This tool is the best ever devised for the purpose. Weight 2 lbs., length 12 inches, opens 2 inches and cuts 1⅛ inches. It has a detachable knife, which can be replaced in a few minutes.

LIGHTNING HOOF SHEARS.

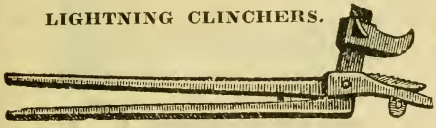


The Shear.

In operation.

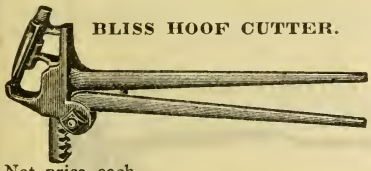
Net price each.....$1.75
The Shears, unlike a pair of nippers, has a square cut, not cutting on a circle; the dull, or outside bit stays where you place it; the knife passes right through to the copper, cutting its way regardless of nails or anything, not teaing the outside or enamel of the hoof, as is so frequently done by the nippers.
A great tool.

LIGHTNING CLINCHERS.



Net price each.....$0.90
This tool does entirely away with the possibilities of being injured by an ugly horse or colt while clinching down the nails.

BLISS HOOF CUTTER.

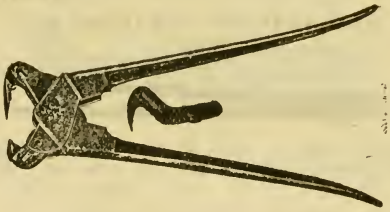


Net price each.....$1.80
Is most powerful.
Does the best and largest range of work.
Easiest kept in order.
Makes easier work of hoof cutting than any other tool made.

LITTLE GIANT BLACKSMITHS' BUTTERIS.

Net price each.
Butteris Complete $1.50
Extra Knives ..... .25
Ebony wood handle, Handles adjustable to length, knives replaceable.

GIANT HOOF PARER.



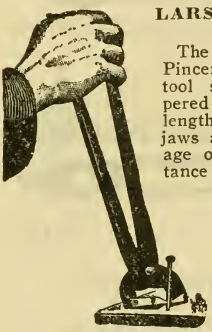
Net price each.....$1.67

Note—The giant is the lightest, handiest, most powerful straight-cut Hoof Parer on the market.

In this tool we have a principle that produces a maximum jaw movement, while the handles can be reached with one hand at any time. This too has the largest amount of leverage, with the least complication of any tool out.

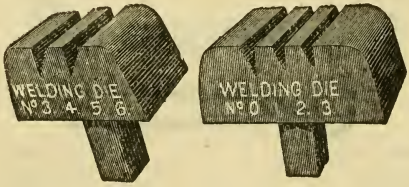
Extra Jaws, each, postpaid.....$0.64

LARSON HOOF PARER



The Larson Blacksmith Pincers are drop forged from tool steel and hand tempered and 13 inches in length. Have wide open jaws and a wonderful leverage owing to the short distance from the rivet to the jaw clip. The handles are long, slim and very strong and the jaws will open wide, thereby enabling a person to pry off any width shoe from a hoof.
Net price each, $0.90

CALK DIES.



Net price each.
Large, for Nos. 3, 4, 5 and 6 Calks.....$0.75
Small, for Nos. 0, 1 and 2 Calks..... .75
Per Set 1.45

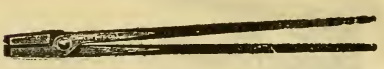
Note—This will be found to be a most convenient and serviceable tool.

HORSESHOERS' KNIFE STONE.

Net price each $0.10

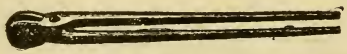
FARRIERS' TOOLS.

BLACKSMITHS' STRAIGHT LIP TONGS.



Sizes, inches	14	16	18	20	22	24
Net price ea.	$0.25	.25	.30	.35	.40	.45

STEEL FORGING TONGS.



Round Nose.

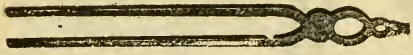
Sizes.	Net price each.
12 to 17 inch	$0.27

BLACKSMITHS' BOLT TONGS.

For Holding Bolts or Round Iron.

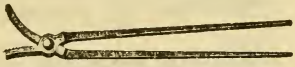
Sizes for	5/16	3/8	1/2	5/8	3/4 R. I.
Net price, pr.	$0.45	.45	.45	.55	.60

SOLID STEEL PICK-UP TONGS.



Sizes, inches	18	20	24
Net price per pair	$0.45	.50	.55

HELLER'S CLINCH TONGS.



Net price each $1.20

COMMON FARRIERS' PINCHERS.

Sizes.	Net price each.
10 inch	$0.45
12 inch	.50
14 inch	.55

CHAMPION BALL BEARING HOOF SHEAR.

Sizes.	Net price each.
12 inch	$2.25
14 inch	2.50
Extra Knives	.60

HELLER'S CUTTING NIPPERS.

No. 24.

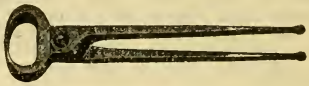
Sizes, inches	10	12	14
Net price each	$0.87	1.09	1.30

HELLER'S HOOF PARERS.

No. 23.

Sizes, inches	12	14
Net price each	$1.10	1.30

HELLER'S FARRIERS' PINCHERS.



Sizes, inches	10	12	14	16
Net price each	$0.60	.85	1.10	1.38

HELLER'S HOOF TESTERS.

No. 27.

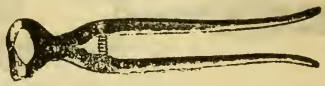
Size.	Net price each.
15 inch	$1.30

ECLIPSE HOOF SHEAR.

Net price each $1.20

Note—The spring brings the tool wide open as soon as the cut is made.

CHAMPION ADJUSTABLE HOOF PARER.



Net price each $1.20

Note—Fitted with adjustable knife, can be replaced when worn out.

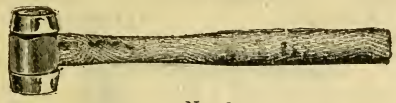
CHAMPION ROUNDING HAMMER.

No. 4.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.15

CHAMPION DOUBLE PEINED HAMMER.



No. 8.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.15

CHAMPION SHARPENING HAMMER.

No. 11.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.15

CHAMPION PATTERN FITTING HAMMER.

No. 9.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.15

CHAMPION ELECTRIC SHARPENING HAMMER.

No. 12.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.15

CHAMPION B. S. HAND HAMMER.

No. 7.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$0.65

CHAMPION FITTING HAMMER.

No. 5.

Sizes. Net price each.

2, 2¼, 2½, 2¾, 3 lbs.....$1.00

CHAMPION ROUND POLE DRIVING HAMMER.

No. 13.

Sizes. Net price each.

14, 16, 18, 20 oz.....$0.63

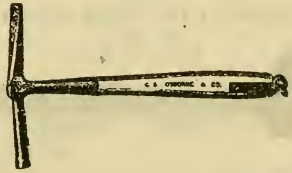
CHAMPION SQUARE POLE DRIVING HAMMER.

No. 14.

Sizes. Net price each.

14, 16, 18, 20 oz.....$0.63

TRIMMERS' HAMMERS.



Net price each.

No. 59, White Hickory Handle.....$1.20

HELLER'S DRIVING HAMMERS.

No. 64.

Sizes. Net price each.
14, 15, 16, 17, 18, 19, 20 oz.....$0.55

HELLER'S PATTERN DRIVING HAMMERS.

No. 65.

Sizes. Net price each.
14, 15, 16, 17, 18, 19, 20 oz.....$0.65

HELLER'S HORSESHOERS' HAND HAMMERS.

No. 63.

Sizes. Net price each.
2, 2¼, 2½, 2¾, 3 lbs.....$0.55

HELLER'S FITTING HAMMER.

No. 62.

Sizes. Net price each.
2, 2¼, 2½, 2¾, 3 lbs.....$1.10

HELLER'S ROUNDING HAMMER.

No. 61.

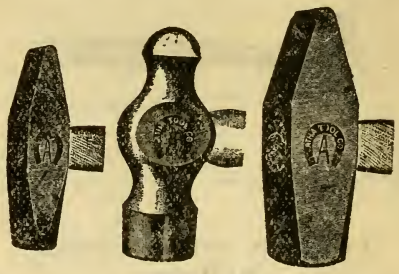
Sizes. Net price each.
2, 2¼, 2½, 2¾, 3 lbs.....$1.30

HELLER'S CAT HEAD HAMMER.

No. 60.

Sizes. Net price each.
2, 2¼, 2½, 2¾, 3 lbs.....$1.30

MACHINISTS' HAMMERS.



Riveting. Ball Pein. Hand.

RIVETING.

Sizes. No.	Weight.	Net Price each.
0	4 oz.	$0.26
1	7 oz.	.28
2	9 oz.	.30
3	12 oz.	.33
4	15 oz.	.35
5	1 lb. 2 oz.	.38
6	1 lb. 6 oz.	.40
7	1 lb. 10 oz.	.42

HAND.

Sizes. No.	Weight.	Net price each.
1	2 lb.	$0.53
2	2 lb. 10 oz.	.57
3	3 lb.	.60
4	3 lb. 8 oz.	.64
5	4 lb. 8 oz.	.71

BALL PEIN.

Sizes. No.	Weight.	Net Price each.
5-0	4 oz.	$0.45
4-0	6 oz.	.45
3-0	8 oz.	.45
2-0	12 oz.	.45
0	1 lb.	.46
1	1 lb. 4 oz.	.50
2	1 lb. 8 oz.	.52
3	1 lb. 12 oz.	.55
4	2 lb.	.58
5	2 lb. 4 oz.	.60
6	2 lb. 8 oz.	.65
7	2 lb. 12 oz.	.70
8	3 lb.	.80

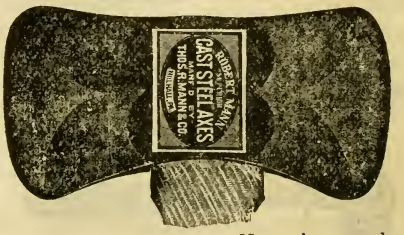
Weights do not include Handles.

Note.—These Hammers are made of best quality Tool Steel and are warranted.

ROBERT MANN'S SINGLE BIT AXES.

Sizes. Net price per doz.
Weights, 3, 3¼, 3½, 3¾ lbs.....$7.50

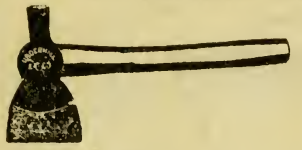
ROBERT MANN'S DOUBLE BIT AXES.



Sizes. Net price per doz.
Weights, 3¼, 3½, 3¾ lbs.....$10.50
25c advance per doz. for each ¼ lb. heavier.

Dozen price on axes does not apply to less than a half dozen.

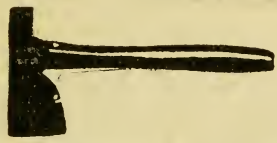
HATCHETS.



Shingling.

Sizes.	Net price each.
No. 1, Shingling	$0.50
No. 2, Shingling	.60

HALF HATCHETS.



Sizes.	Net price each.
No. 1, Half	$0.50
No. 2, Half	.60

CLAW HATCHETS.

Sizes.	Net price each.
No. 1, Claw	$0.50
No. 2, Claw	.60

LATH HATCHETS.

Sizes.	Net price each.
Underhill's Pattern	$0.75

HAND AXES.

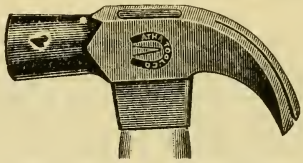
Sizes.	Net price each.
No. 2, 4½ inch cut	$0.75
No. 3, 5 inch cut	.87
No. 4, 5½ inch cut	.93
No. 5, 6 inch cut	1.00

ADZE EYE NAIL HAMMERS.

Bell Face.

No.	Size.	Weight.	Net price each.
51	1	1 lb. 4 oz.	$0.55
51½	1½	1 lb.	.48
52	2	13 oz.	.50
53	3	7 oz.	.45

ADZE EYE NAIL HAMMERS.



Weights do not include Handles.

Note.—These Hammers are made of best quality Tool Steel and are warranted.

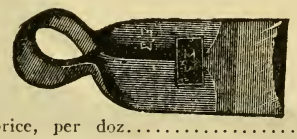
Straight Face.

No.	Size.	Weight.	Net price each.
41	1	1 lb. 4 oz.	$0.55
41½	1½	1 lb.	.48
42	2	13 oz.	.50
43	3	7 oz.	.48

CARPENTERS' ADZES.

Net price, each $1.40

GRUB HOES.

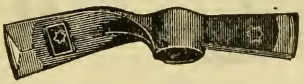


Net price, per doz..... $3.65

PICKS.

Net price, per doz..... $3.75

MATTOCKS.

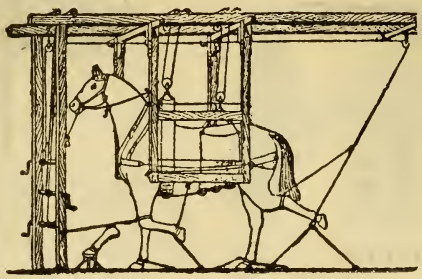


Net price, per doz..... $4.75

Dozen price does not apply to less than a half-dozen of a kind.

MARTIN HORSE SHOEING RACK.

Shipped From Factory.



Net price each $40.00

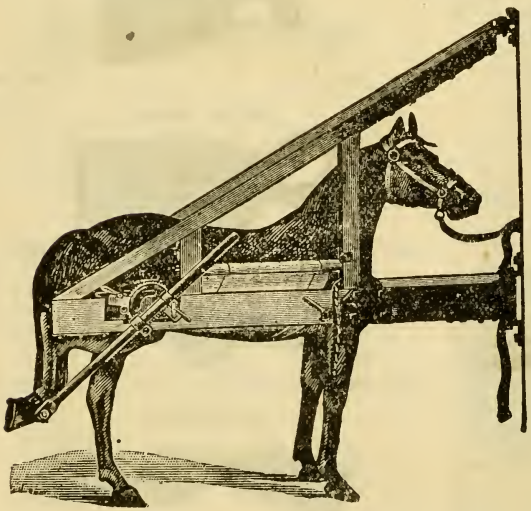
You doubtless are already convinced by many instances, of the necessity of some preventive of the danger and aid to shoeing wild horses. The limited production of the Martin Horse Shoeing Rack—such a practical invention in successful use for eight years for shoeing vicious kicking and crippled horses—heretofore prevented its more general sale.

It pays for itself in a short time. The horse fastened in it can not injure itself, and parties we have sold to find their trade gladly pay $1.00 to $3.00 and often $5.00 extra for shoeing a bad horse. You can work unmolested, and your labor is easy and more rapid. Experience has proved it especially valuable for shoeing colts, breaking them to shoeing at once. Careful blacksmiths put all restless horses in it; their lives are no longer in danger and time is saved thereby. Hundreds of testimonials read that they would not carry on shoeing without one. A blacksmith stating that as long as he carried on shoeing, and if he could not get another, he would not sell his at any price.

We guarantee the Rack to be perfectly satisfactory, and to prove that you take no risk, we agree to take back the rack and refund your money if it does not do as we promise. No horse or mule but can be held and easily shod. Strongly made of best materials. One will last a lifetime.

THE BARCUS HORSE STOCKS.

Shipped From Factory.



We answer the following questions which are often asked:

1. What is the price of your Stocks complete? $62.50.
2. How long is the frame when in use? 10 feet.
3. Do they swing out of the way when not in use? Yes, both ways up against the wall.
4. What keeps the Stocks from swinging when in use? A brace from rear end of frame to ceiling or floor.
5. How many Leg Arms go with every machine? One Leg Arm only.
6. Do you advise using two Leg Arms? Yes, and some use more, although one is used very successfully.
7. What does an extra Leg Arm cost? $20.
8. Can you handle the hind foot as well as the front foot? Yes.
9. Is there danger of a horse getting hurt in the Stocks? No, even the veterinaries use them.
10. Do you give directions for setting up and using Stocks? Yes, very complete with every machine. Be sure to read them.
11. What is the freight on the Stocks? They are billed out at 450 lbs., knocked down and third class rate. See that you are not overcharged for freight.

Net Cash price each.....$62.50

HOW TO MEASURE HALF PATENT AXLES.

The size of the axle is the size of the square part of the bed just back of the collar. The length of the axle is measured as indicated. This is equivalent to hub length. The axle box itself will measure about ¼ inch less than length of axle. Give us size and length of axle as above indicated and save all errors.

We are prepared to weld axles at the following net prices. Give distance between collars when axles are welded, or give width of track in feet and inches.

	Price per set
1⅛ inch and smaller	$0.95
1¼ inch	1.15
1⅜ inch	1.35
1½ inch	1.50
1⅝ inch	1.90

For shaping Axles for Drop or Arch Bed, we charge as follows:

	Price per set.
1⅛ inch and smaller	$0.50
1¼ inch	.70
1⅜ and 1½ inch	1.00

Prices on Cranked Axles on receipt of drawings with exact dimensions.

No. 12 HALF PATENT AXLES, SHORT BED, OR STUBS.

Steel Double Collar.

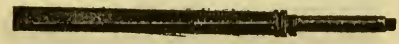
Sizes.	Net price per set.	Sizes.	Net price per set.
¾x6	in.....$1.12	1⅛x6½	in.....$1.48
¾x6½	in..... 1.12	1⅛x7	in..... 1.48
⅞x6	in..... 1.15	1¼x6½	in..... 1.80
⅞x6½	in..... 1.15	1¼x7	in..... 1.80
15/16x6	in..... 1.16	1⅜x7	in..... 2.44
15/16x6½	in..... 1.16	1⅜x7½	in..... 2.44
1 x6½	in..... 1.28	1½x7	in..... 3.21
1 x7	in..... 1.28	1½x7½	in..... 3.21
1 1/16x6½	in..... 1.35	1½x8	in..... 3.21
1 1/16x7	in..... 1.35	1⅝x8	in..... 4.40

No. 11 HALF PATENT AXLES, LONG SQUARE BED.

Steel Double Collar.

Sizes.	Net price per set.	Sizes.	Net price per set.
¾x6	in.....$1.40	1⅞x7	in.....$1.80
¾x6½	in..... 1.40	1¼x6½	in..... 2.19
⅞x6	in..... 1.40	1¼x7	in..... 2.19
⅞x6½	in..... 1.40	1⅜x7	in..... 3.08
1 x6½	in..... 1.54	1⅜x7½	in..... 3.08
1 x7	in..... 1.54	1½x7	in..... 3.85
1 1/16x6½	in..... 1.67	1½x7½	in..... 3.85
1 1/16x7	in..... 1.67	1½x8	in..... 3.85
1⅛x6½	in..... 1.80	1⅝x8	in..... 5.00

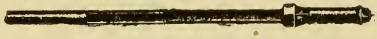
No. 11 HALF PATENT AXLES, FANTAIL BED.



Steel Double Collar.

Sizes.	Net price per set.	Sizes.	Net price per set.
¾x6½	in.....$1.38	1⅛x6½	in.....$1.80
⅞x6½	in..... 1.38	1⅛x7	in..... 1.80
1 x6½	in..... 1.54	1¼x7	in..... 2.19
1 1/16x6½	in..... 1.67	1⅜x7½	in..... 3.40

No. 11 HALF PATENT AXLES, COACH BED.



Steel Double Collar.

Sizes.	Net price per set.	Sizes.	Net price per set.
⅞x6½	in.....$1.50	1⅜x7½	in.....$3.38
1 x6½	in..... 1.64	1½x8	in..... 4.15
1⅛x6½	in..... 1.90	1⅝x8½	in..... 6.00
1⅛x7	in..... 1.90	1¾x9	in..... 7.50
1¼x7	in..... 2.29		

No. 11 HALF PATENT AXLES, FANTAIL-SWAGED BED.

Sizes.	Net price per set.	Sizes.	Net price per set.
¾x6½	in.....$1.43	15/16x6½	in.....$1.47
⅞x6½	in..... 1.45	1 x6½	in..... 1.59

THE MATHER "THOUSAND MILE" AXLES.

Short Bed.

Sizes.	Net price	Sizes.	Net price
¾x6½	in.....$2.00	1 1/16x6½	in..... 2.40
⅞x6½	in..... 2.00	1⅛x7	in..... 2.60
15/16x6½	in..... 2.00	1¼x7	in..... 3.15
1 x6½	in..... 2.25		

Long Bed.

¾x6½	in.....$2.45	15/16x6½	in..... 2.45
⅞x6½	in..... 2.45	1 x6½	in..... 2.70

Above sizes in fan-tail swaged bed, 5c per set extra.

1 1/16x6½	in..... 2.95	1¼x7	in..... 3.80
1⅛x7	in..... 3.20		

Above sizes in coach shape, 10c per set extra.

Note.—Will run 1,000 miles with one oiling. Positively dust and dirt proof. Cuts away less of hub than any other axle. Cannot get out of order. Simplicity itself.

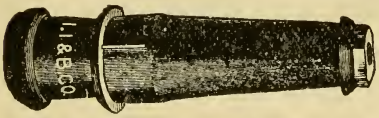
HALF PATENT DOUBLE COLLAR AXLE BOXES.

Sizes.	Net price per set.	Sizes.	Net price per set.
¾ in	.....$0.47	1⅛ in	.....$0.88
⅞ in	..... .59	1¼ in	..... 1.15
15/16 in	..... .63	1⅜ in	..... 1.45
1 in	..... .65	1½ in	..... 1.75
1 1/16 in	..... .68		

SOLID COLLAR CONCORD EXPRESS AXLES.

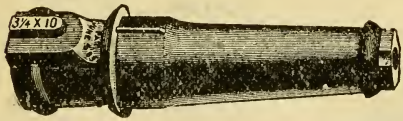
Size axle.		Net price per set. Square bed.	Coach shape.	Short bed.
1⅛x6½	in. box.....	$ 2.93	$ 3.18	$2.47
1¼x7	in. box.....	3.60	4.00	2.99
1¼x7½	in. box.....	3.60	4.00	2.99
1⅜x7	in. box.....	4.36	4.80	3.99
1⅜x7½	in. box.....	4.36	4.80	3.99
1½x8	in. box.....	5.31	5.75	4.36
1⅝x8	in. box.....	6.30	6.75	....
1¾x9	in. box.....	7.38	8.00	....
2 x10	in. box.....	9.90	10.90	....

WAGON SKEINS AND BOXES. COMPLETE.



Sizes.	Net price per set.	Sizes.	Net price per set.
2½ x 7 inch.	$1.35	3¼ x 10 inch.	$2.25
2½ x 7½ inch.	1.35	3¼ x 11 inch...	2.33
2½ x 8 inch.	1.43	3½ x 10 inch...	2.40
2¾ x 8 inch.	1.58	3½ x 11 inch...	2.50
2¾ x 8½ inch.	1.62	3½ x 12 inch...	2.64
2¾ x 9 inch.	1.80	3¾ x 11 inch...	2.70
3 x 9 inch.	1.80	3¾ x 12 inch...	2.82
3 x 10 inch.	2.00	4 x 12 inch...	3.18

ULRICH PATENT TRUSS SKEINS.



Sizes.	Net price per set.
2¾ x 8 inch	$2.10
2¾x8½ inch	2.16
3 x 9 inch	2.35
3¼ x 10 inch	3.00
3½ x 10 inch	3.15
3½ x 11 inch	3.30
3¾ x 11 inch	3.55
3¾ x 12 inch	3.75
4 x 12 inch	4.20

Note.—The best Truss Skein on the market.

WAGON SHOES.

	Net price each.
2 inch, weight each 16½ lbs.	$0.63
2½ inch, weight each 19½ lbs.	.73
3 inch, weight each 22 lbs.	.86
3½ inch, weight each 24 lbs.	.90
4 inch, weight each 25 lbs.	.98

SANDAGE STEEL WAGON SKEINS AND BOXES.

Forged from continuous blank of

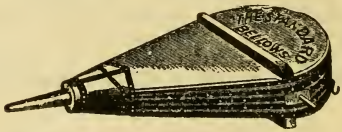
WROUGHT STEEL.

Sizes.	Net price per set.
2¼ x 7 inch	$3.74
2½ x 7½ inch	3.80
2½ x 8 inch	3.87
2¾ x 8 inch	4.05
2¾ x 8½ inch	4.13
3 x 9 inch	4.33
3 x 10 inch	4.46
3¼ x 10 inch	5.00
3¼ x 11 inch	5.25
3½ x 10 inch	5.53
3½ x 11 inch	5.67
3½ x 12 inch	6.30
3¾ x 11 inch	6.65
3¾ x 12 inch	6.65
4 x 12 inch	8.00

LINCH PIN STEEL SKEINS AND BOXES

Shipped from factory at above prices.

BLACKSMITHS' BELLOWS.



STANDARD PATTERN.

Width, Sizes.	Net price each.
24 inch	$ 4.00
26 inch	4.40
28 inch	4.80
30 inch	5.00
32 inch	5.75
34 inch	6.20
36 inch	7.00
38 inch	7.85
40 inch	9.10
42 inch	10.80
44 inch	13.50

EXTRA LONG PATTERN.

Width, Sizes.	Net price each.
24 inch	$ 4.50
26 inch	5.25
28 inch	6.00
30 inch	6.25
32 inch	7.00
34 inch	8.00
36 inch	8.50
38 inch	9.75
40 inch	10.50
42 inch	13.00
44 inch	16.00

DUCK'S NEST TUYERE IRONS.

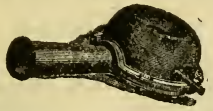
Single. Double.

	Net price each.
No. 2, Single Duck's Nest, weight 15 lbs.	$0.60
No. 2, Double Duck's Nest, weight 17 lbs.	0.70

WARREN'S TUYERE IRONS.

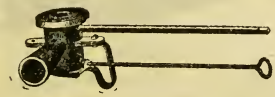
Very simple and easily adjusted.
Net price each $1.50
Note.—The blast is regulated by simply revolving the ball, which has three unequal sides. Open the bottom valve, and all cinders and ashes drop out. Weight, 31 lbs.

CLARK'S TUYERE IRONS.



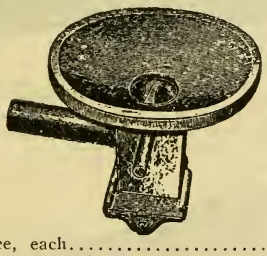
Net price each.
No. 2, Weight about 21 lbs.....$1.10
Note.—These Tuyere Irons are made with ball valves; are convenient and durable.

NORTON'S TUYERE IRONS.



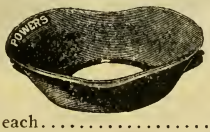
Net price each.
Weight, about 27 lbs. $1.40
Note.—To regulate the blast, turn the large rod. The cinders and ashes may be removed by drawing out the small rod, which opens the side. The levers and spring are readily changed to either side for right or left hand use.

SUTTON'S TUYERE IRON.



Net price, each.....$2.25
A new and desirable Tuyere Iron. Having a fire-pot combined with the Tuyere Iron, it is the best thing ever invented for the forge.

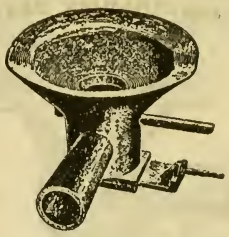
POWER'S FIRE POT.



Net price, each.....$1.00
Concentrates the heat where wanted.
Fits any common tuyere iron.
Prevents the fire from spreading.
Keeps it clean and bright.

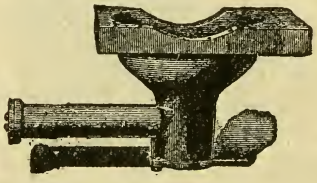
POWER'S TUYERE AND FIRE POT.

TUYERE AND FIRE POT IS CAST SOLID TOGETHER; WEIGHS, COMPLETE, ABOUT 45 POUNDS.



Net price, each.....$3.25
Has three different changes of blast. Cinders and ashes can be let down without disturbing fire.
It concentrates the heat just where it's wanted.
The fire always the same.
Cannot spread at the bottom.
It does away with clay, mortar, brick, etc.
You can have a small or large fire as needed.

ROOT'S NEW ACME FIRE BED AND TUYERE IRONS.



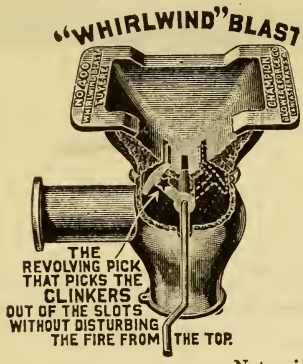
The sides of the Tuyere are kept cool by circulation of air around the bowl.
No clay need be used in same.

Sizes.	Net price, each.
No. 3, 14½ in. square, 11½ in. deep, weight, 63 lbs.	$4.75
No. 4, 18 in. square, 12 in. deep, weight 80 lbs.	5.75

THOMPSON'S EXTENSION FIRE TUYERE IRONS.

Size. Net price each.
Fire Bed 15 in. x 20 in., depth 5½ in., weight 50 lbs. $5.50
Any size fire, from 2 inch up to 14 inches in length may be obtained with this Tuyere. Is composed of the following parts: Grate with four slots as shown in cut, two running crosswise, remaining open all the time and two running lengthwise and which are so arranged that they can be varied in size, thus controlling the length of the fire. This is accomplished by moving the far end of the fire bed in or out by means of the long rod shown in cut.

No. 400 CHAMPION "WHIRLWIND" BLAST ANTI-CLINKERS HEAVY NEST TUYERE IRON.



Net price each.

No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron is 5 in. deep, 8¾ in. wide and 10½ in. long, over all 12⅜ x 14¾ in. Weight, 60 lbs. $5.00

A TUYERE IRON THAT MAKES A "WHIRLWIND" BLAST.

Registered in U. S. Patent Office.

The No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron increases the output of a blacksmith fire from one to two hours per day with at least one-tenth to one-quarter saving in coal. This is accomplished by consuming all the heating elements within the coal, and not blowing the heat or hot air out of the fire up the chimney, as is the trouble with all other Tuyere Irons.

The illustration of the "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron plainly shows how it is built and how it works. It has a heavy cast iron nest into which the roaring white heat pressure blast of the No. 400 Blower is delivered through three slots. One of these slots is in the bottom, or centre of the nest, the other two slots are one on each side 2 inches above the centre slot on a forty-five degree angle.

The roaring forcing pressure blast coming through the three slots in opposite directions, and meeting in the centre of the tuyere nest creates, in combination with the heavy cast iron walls of the heavy nest, a "Whirlwind" blast. In other words, prevents the blast from going in the air and right here is where the great success of this invention is found, as the blast coming from the three distinct directions, and meeting in the centre of the tuyere nest, creates a current of air which produces a circular rotary "Whirlwind" blast, forcing the blast through the coal to the walls of the nest and again returning it to the centre of the tuyere iron; giving the iron in the fire all the heating elements in the coal, which produces the hottest white heat blacksmith fire that ever was seen, making it the greatest money making invention that ever was placed in the blacksmith shop, for the simple reason that the operator not only can accomplish more work with less labor but, at the same time, effecting a most wonderful saving in consumption of coal.

CLARK COAL.

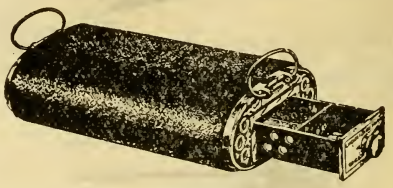
Net Price of Coal, per doz.....$0.60

Is put up in neat, convenient brickettes or cakes, 2⅛ x 8½ inches. It is guaranteed to burn perfectly.

Directions for Using.—Place a piece of Clark Coal in a brisk fire until it has become red through. Then take it out and leave it for a few seconds, until the little flame which appears, has died away. Afterwards place it in the sheet metal box or drawer and then insert same in the heater.

Coal can be extinguished with water and used again until entirely consumed.

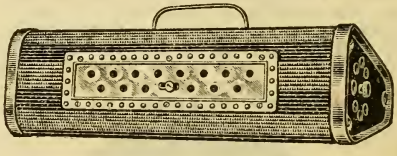
CLARK CARRIAGE HEATERS.



LEADER.

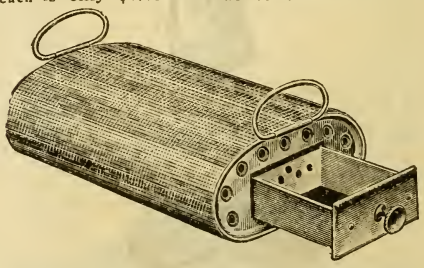
Is 12 inches long. Metal throughout. Uncovered, Strong, Solidly riveted. Guaranteed to please. Weight, 4 lbs.

Price, each, with one dozen coal.....$1.50



No. 7D.

CONSIDERING THE PRICE, all of our newest improvements, adjustable side ventilators, too—as well as those at the ends. These regulate the draft and heat. And yet the price each is only $2.25 without coal.



No. 3D.

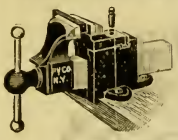
3D Clark Heater is made with white metal ends, has covering of Brussels carpet and is 14 inches long. Weight, 5 lbs.

Price, each, without coal.....$2.00

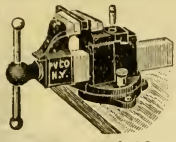
5B Clark Heater is similar to the 3D, except it is only 12 inches long. Carpet covered.

Price, each, without coal.....$1.50

PRENTISS' MACHINISTS' VISES.



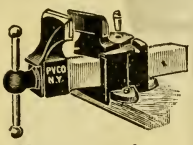
Nos. 2 and 3
Stationary Bottom.



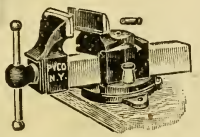
Nos. 19 and 20.
Swivel Bottom.

Sizes.	Jaws open.	Weight.	Net price each.
No. 2, 3½ in.	4¾ in.	28 lbs.	$5.75
No. 3, 4½ in.	6 in.	54 lbs.	8.75
No. 19, 3½ in.	4¾ in.	32 lbs.	7.00
No. 20, 4½ in.	6 in.	65 lbs.	10.50

PRENTISS' WOOD WORKERS' VISES.



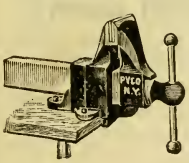
Nos. 12 and 10.
Stationary Bottom.



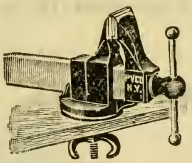
Nos. 27 and 26.
Swivel Bottom.

Sizes.	Jaws open.	Weight.	Net price each.
No. 12, 3½ in.	7 in.	30 lbs.	$6.75
No. 10, 4½ in.	9½ in.	59 lbs.	9.25
No. 27, 3½ in.	7 in.	34 lbs.	8.00
No. 26, 4½ in.	9½ in.	67 lbs.	10.75

PRENTISS' BULL DOG WOOD WORKERS' VISES.



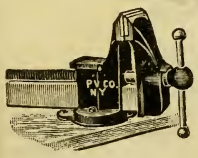
No. 59.
Stationary Bottom.



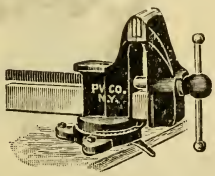
No. 99.
Swivel Bottom.

Sizes.	Jaws open.	Weight.	Net price each.
No. 59, 4¼ in.	9 in.	48 lbs.	$5.90
No. 99, 4¼ in.	9 in.	58 lbs.	7.00

SHEPARD WOOD WORKERS' VISES.



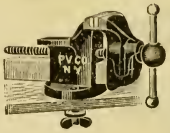
No. 68.
Stationary Bottom.



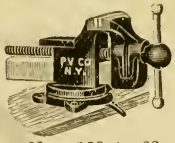
No. 69.
Swivel Bottom.

Sizes.	Jaws open.	Weight.	Net price each.
No. 68, 4½ in.	9 in.	42 lbs.	$4.25
No. 69, 4½ in.	9 in.	46 lbs.	5.00

NEW SHEPARD VISES.



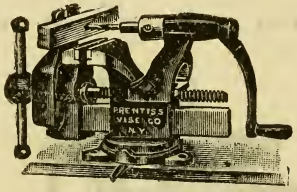
Nos. 158 to 163.
Stationary Bottom.



Nos. 159 to 63.
Swivel Bottom.

Sizes.	Jaws open.	Weight.	Net price each.
No. 158, 2 in.	2 in.	2½ lbs.	$0.65
No. 160, 2 in.	2 in.	4 lbs.	1.05
No. 161, 2½ in.	3 in.	11 lbs.	1.40
No. 162, 3½ in.	4 in.	16 lbs.	1.95
No. 163, 4 in.	6 in.	30 lbs.	2.75
No. 159, 2 in.	2 in.	3 lbs.	.80
No. 60, 2 in.	2 in.	5 lbs.	1.25
No. 61, 2½ in.	3 in.	12 lbs.	1.60
No. 62, 3½ in.	4 in.	18 lbs.	2.10
No. 63, 4 in.	6 in.	32 lbs.	3.15

HANDY DRILL ATTACHMENTS.



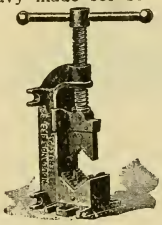
For Shepard's New Vises.

Sizes.	Net price each.
Drill Attachment for Vise No. 62 and No. 162	$1.75
Drill Attachment for Vise No. 63 and No. 163	2.00

Note.—This is the only Drilling Attachment that can be securely fastened to vise, thus enabling operator to do as perfect work as with expensive post or bench drill. Sockets are fitted for ½ inch round shank drills.

PIPE VISES.

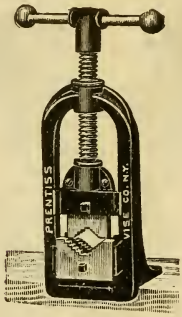
Heavy made for service.



No. 1.

Sizes.	Net price each.
No. 1, holding ⅛ to 2 inch Pipe	$2.25
No. 0, holding ¼ to 3 inch Pipe	3.25

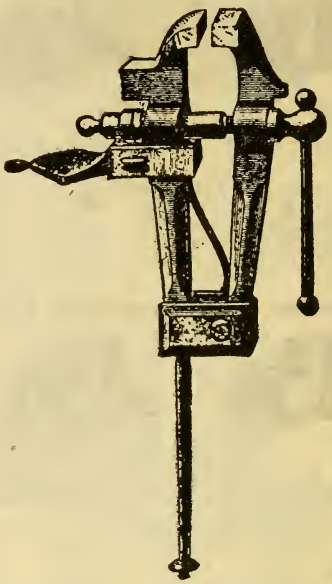
PRENTISS' PIPE VISE.



Net price each.

No. A. Holds ⅛ to 2 in. Pipe.....$1.20

FARRIER'S SOLID BOX WROUGHT VISE



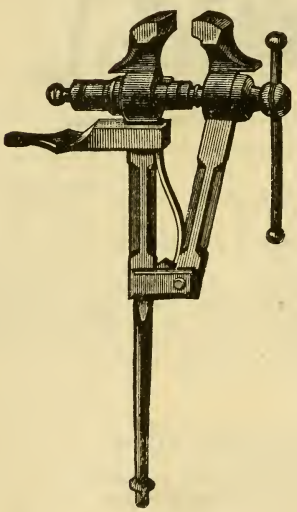
Net price each.

No. 60, weight 60 lbs., width jaw 4½ in. $6.75

No. 65, weight 65 lbs., width jaw 4¾ in. 7.40

No. 70, weight 70 lbs., width jaw 5 in.. 7.85

WROUGHT IRON SOLID BOX VISES.



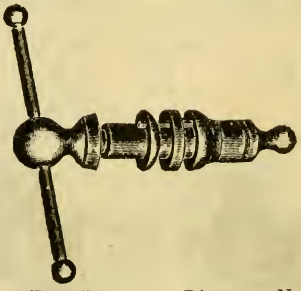
No.	Weight.	Width of Jaw.	Net price each.
		about	
35	35	3¾ inch	$3.65
40	40	4 inch	3.78
50	50	4½ inch	4.14
60	60	5 inch	4.65
65	65	5 inch	5.10
75	75	5¼ inch	5.90
80	80	5½ inch	6.30
90	90	5¾ inch	7.20
100	100	6 inch	7.90

WROUGHT IRON BENCH SCREWS.

Double thread with wood handle and movable collar.

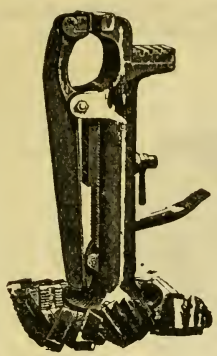
Diameter.	Net price each.
1 inch	$0.30
1⅛ inch	.35
1¼ inch	.40
1½ inch	.70

VISE BOXES AND SCREWS.



No.	For Vises From	Diameter of Screw.	Net price each.
1	No. 25 to 40	1 in.	$2.80
1½	No. 45 to 55	1⅛ in.	3.20
2	No. 60 to 65	1¼ in.	3.20
2½	No. 70 to 75	1¼ in.	3.60
3	No. 80 to 85	1⅜ in.	3.60
3½	No. 90 to 95	1⅜ in.	5.20
4	No. 100 to 125	1¾ in.	5.60

HORSESHOERS' FOOT VISES.



"LITTLE GIANT."

For forming, sharpening and welding calks on horse and ox shoes, for making bolt heads, and takes the place of an ordinary vise for bending and shaping hot iron, thus combining two machines in one. Shoe calks can be made sharp or square for winter or summer use, and the dies are so shaped that the calks are better formed than they can be in the ordinary way, and from two to three times as many. The die on which the calks are formed is of the best tool steel, and is shaped so that it forms the calk the right shape. Sharp or square calks can be formed by simply turning steel die around.

Net price each.

Little Giant, complete with Shoeing Dies, only $10.50
Little Giant, complete with Shoeing Dies and Bolt Heading Tools..... 12.50

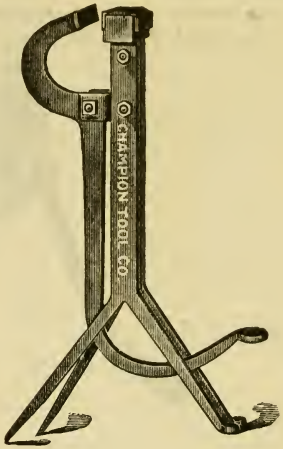
GREEN RIVER FOOT VISE.

The vise which drops open when not in use forms both sharp and straight calks, the forming die being of tool steel of proper shape. The die may be turned over for summer work.

Net price each.

Green River for Shoeing only..... $9.75
Green River for Shoeing and Bolt Heading $10.60

CHAMPION MOVABLE FOOT VISE.



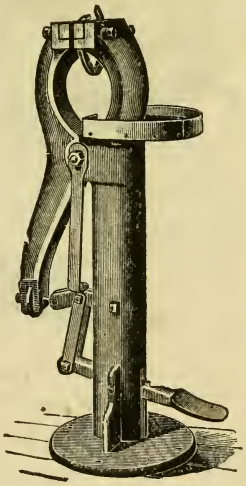
Champion Movable.

Effective and cheap. Reversible steel block for sharpening shoes in winter. Made of wrought iron and steel.

Net price each.

Champion Movable $6.75

CHAMPION STATIONARY FOOT VISE.



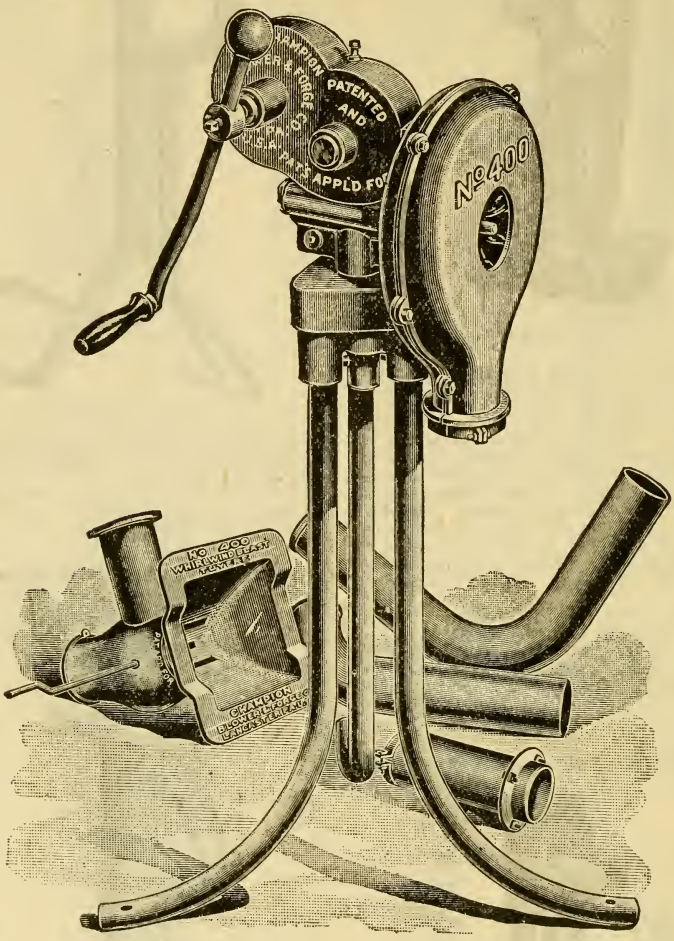
This is the most perfect tool of its kind yet produced. By a simple adjustment the grip of the jaws is adjusted to thick or thin shoes or iron, and by adjusting the stop it can be made to lock itself or not, at pleasure, which is a feature that no other horseshoers' vise possesses. The locking of the vise does away with an extra vise for filing shoes and a light touch of the toe under the foot lever releases it. They are strongly made, with steel jaws, one jaw being removable.

Net price each.

Champion Stationary $11.00

THE FAMOUS No. 400 CHAMPION STEEL BLACKSMITH BLOWER.

This is the Blower that has Revolutionized the World's Hand Blacksmiths' Fires and Made Blacksmithing a Most Profitable Business.



THE FAMOUS No. 400.

Made with Adjustable Ball Bearings Only.

WHY Is the No. 400 Blower Famous? ASK AN OWNER.

Full description next page.

From Stock—Net price each

No. 400 Champion Steel Blacksmith Blower No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron (illustrated on page 38) Fan 12 in. in diameter, complete with Piping. Weight 150 lbs.....$18.00

No. 400 Champion Steel Blacksmith Blower is made for right or left-hand fires. Right-hand Blowers always furnished unless otherwise specified.

No. 400 With Electric Attachment—from factory 65.00

THE FAMOUS No. 400 CHAMPION STEEL BLACKSMITH BLOWER.

Made with Adjustable Ball Bearings Only.

The No. 400 Champion Steel Blacksmith Blowers and Steel Forges, after eight years of practical blacksmith work, number over 272,000 today in the hands of their very happy users. We can say with great pleasure that the No. 400 Blowers purchased eight years ago are today running as smooth and as noiseless as they run the first day they were placed to the fire, and in our best judgment, we believe the same can be said of the No. 400 Blower after it has been running the lifetime of the average man.

The No. 400 "Patented" High Speed Spiral Gearing is the only high speed gearing that can be possibly built to run a Blower at the *extreme high speed* that is *necessary* to produce a *roaring, white heat pressure blast* without *early destruction* of the *gearing,* and therefore, ask those who have the opportunity to examine any of the oldest No. 400 Blowers they can find running, and it will be seen that the gearing *runs smooth, noiseless* and even to the hand. It will also be found that the crank is *without lost motion,* which shows that the gearing and entire machinery of the No. 400 Blower is as good as the day it left the factory.

The reason why the No. 400 Spiral Gearing stands in a class absolutely of its own for *extreme high speed,* is that the No. 400 "Patented" Spiral Gearing is simple in construction and all parts are large, strong and powerful. The Spiral Shaft, which by the way is the only one piece of the entire gearing that runs at high speed, and the spiral gear are the same in size and diameter, and have the same size teeth that are used on spiral gears and shafts running at 20,000 revolutions per minute carrying a heavy load, while the No. 400 Champion Steel Blower at no time runs at a higher speed than 2,000 revolutions per minute and in a No. 400 Blower carries no load, which makes *durability an absolute certainty.*

Another reason why the No. 400 "Patented" High Speed Spiral Gearing is durable is that it has a continuous meshing with a concaved spiral gear riding the spiral shaft lengthwise with eight full teeth of the spiral gear continuously meshing into eight full teeth of the spiral shaft *which forever makes lost motion and noise impossible.*

The No. 400 Blower is furnished with the "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron which enables us to *guarantee* the No. 400 Blower to *increase* with ease the output of a *blacksmith fire fully two hours per day* with a *saving* in *coal* of at least *once or twice* the *first cost* of the No. 400 Blower *every year* it is *used.* This is accomplished by consuming *all the heating elements* in the *coal.* The "Whirlwind" blast *does not blow* the *heat* and *hot air* out of the fire and *up the chimney* as is the trouble with all other Tuyere Irons. See "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron shown on page 38.

Revolutionizing and changing a mechanical custom brought down from ancient times, requires a tool of more than ordinary ability, and this achievement of revolutionizing the Bellows, the Lever Blowers and Lever Forges of the world, belongs to the No. 400 Champion Steel Blowers and Steel Forges. To revolutionize a system of doing work is something that comes to few of us, and therefore, has instilled a special pride of individuality in the construction of every No. 400 Champion Steel Blower and Steel Forge that is manufactured.

The general construction of this Blower is, therefore, of the finest and highest grade that can be made out of phosphor bronze and tool steel. It is supplied with *adjustable ball bearings* which are made of the highest grade tool steel. The cups and cones are lathe turned, *hardened as hard as glass* and ground to the *highest possible finish,* making the most durable and practical bearing that can be constructed by human hands.

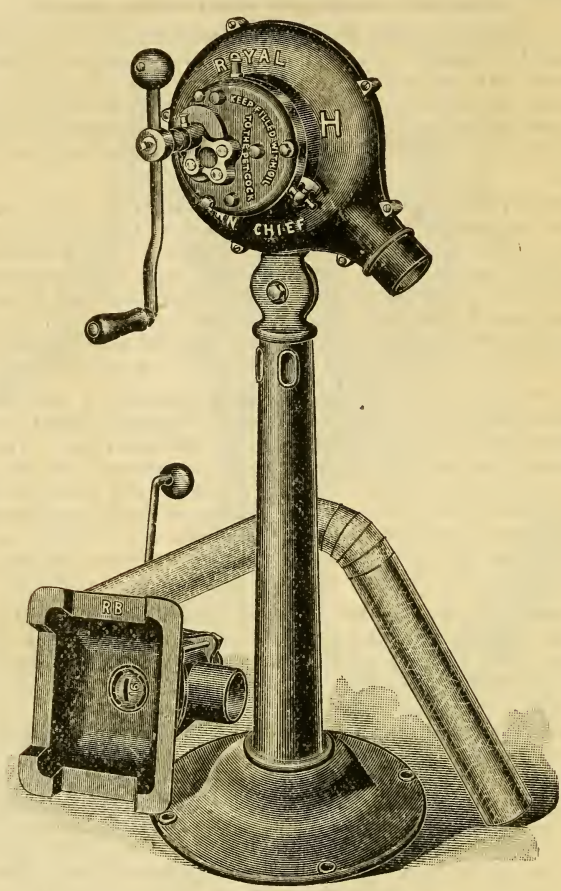
Net price each

No. 400 Champion Steel Blacksmith Blowers, No. 400 Champion Whirlwind Blast Anti-Clinker Heavy Nest Tuyere Iron, Fan 12 in. in diameter. Complete with Piping, Weight 150 lbs.—from stock.....$18.00

No. 420 Same except Fan 14 inches, Weight 170 lbs.—from factory..... 21.00

No. 421 Same except Fan 16 inches, Weight 175 lbs.—from factory..... 22.50

ROYAL BLOWER.



"The Successful Blower"

Crank Turns Forward or Backward.

Noiseles and easy to Operate.

Gear case is oil-tight and dust-proof. Gears run in a continuous bath of oil.

Fire-pot is 8x9½x4 inches inside.

Gears are Phosphor Bronze and Steel, flat and straight cut. No Spiral or Worm Gears.

A powerful blast; lasting after blast.

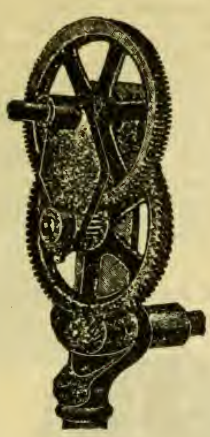
Fan, 12 inches. Height, 47 inches. Weight, 135 pounds.

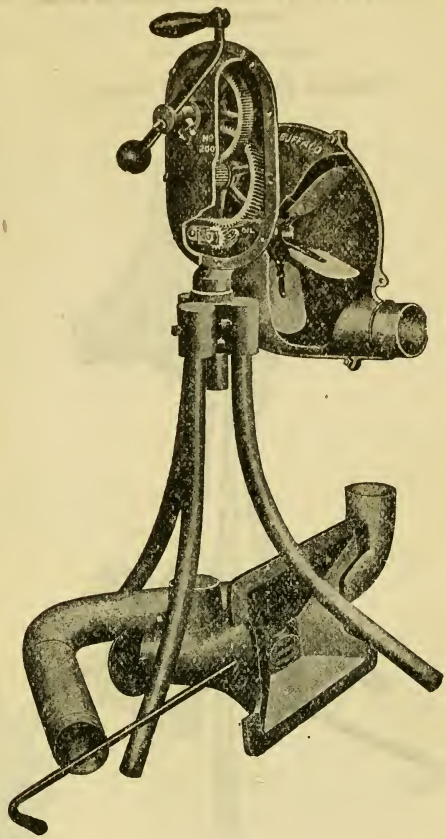
Can be furnished to operate with the right arm, for left-handed smiths, when desired.

Net price, complete as shown—from stock $16.00

Royal Hand and Power Blower Combined—from factory. Net price..... 20.00

BUFFALO No. 200 GEARED HAND BLOWER.





"Pride of the Modern Smithy"

Buffalo No. 200 is the latest improved type of hand blower—built on mechanical principles.

Cut shows right-hand blower—also built left-hand if desired, on special order.

Patent applied for.

BUFFALO NO. 200 BLOWER AND NO. HH. TUYERE.

	Net price each
Buffalo No. 200 with tuyere, price	$13.75
Buffalo No. 200 without tuyere, price	13.00
No. HH. tuyere alone, price	4.00
Size HH. tuyere 11½x9x4 in., Weight	37 lbs.

Heavy cut spur and helical gears, mounted in a rigid box frame entirely independent of casing and run in oil. When once oiled blower remains in perfect condition for months.

GUARANTEE.—1st, against all cost of repairs due to wear for five years; 2d, to give the most powerful blast; 3d, to give the most air per revolution; 4th, to be the easiest running; 5th, to be the most durable hand blower built.

Height to crank (adjustable)	38-44 in.
Diameter of fan case	12 in.
Weight of blower	70 lbs.

GUARANTEED CERTIFICATE.

Buffalo, N. Y......190....

BE IT KNOWN, to the purchaser of this machine that same is hereby guaranteed against cost of repairs due to wear for five years from date of this certificate. All parts wearing out within this time will be replaced free of charge f. o. b. cars Buffalo, N. Y., and no questions asked. Mention date of this certificate, name and style of the machine.

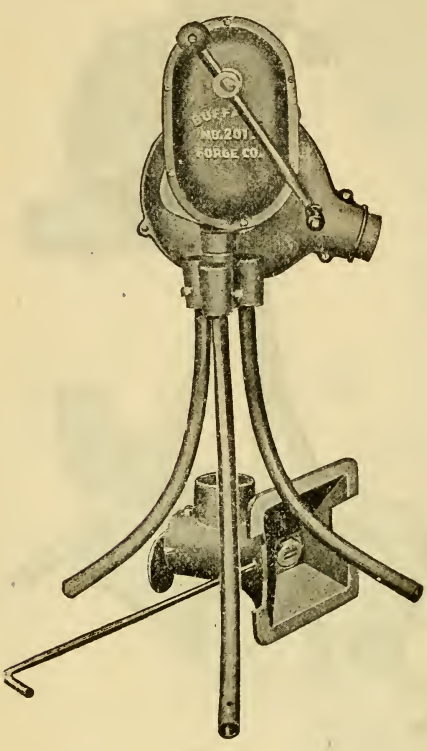
The machine is also guaranteed to be of the same capacity and strictly as described in Catalog No. 77, 1907 edition. *BUFFALO FORGE COMPANY,*

[Seal.] *W. F. Wendt, President.*

BUFFALO No. 201 GEARED HAND BLOWER.

Right or Left Hand.

Shipped Direct from Factory.



BUFFALO No. 201 GEARED HAND BLOWER.

Buffalo Improved Side and Center Blast. Tuyere No. HH.

The immense advantage of this tuyere over all others is at once recognized.

By turning the ball sideways or vertical, a blast is secured as desired. This tuyere is regularly furnished with Buffalo Nos. 200 and 201 Blowers.

Blower is adjustable for height, and fan casing will deliver blast at any angle, but does not give quite as much air as the standard scroll fan casing used on No. 200 Blower. The weight and height same as No. 200 on previous page.

See guarantee.

"Pride of the Modern Smithy."

Turn the crank either way. This is a right or left hand blower.

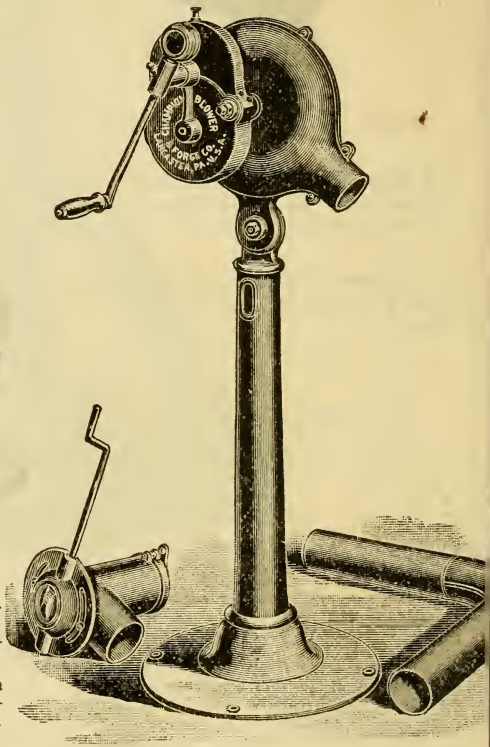
Net price with tuyere.....$16.00
Net price without tuyere..... 15.50

Weight and height same as Buffalo No. 200 Blower, see previous page.

Features of Buffalo No. 200 and 201 Blowers.

The spur and helical gears are cut and finished on special machinery. Spiral gears which transmit power by sliding contact with consequent friction and wear, not used in this blower. The regular wear of such gears is bound to require early replacement. The gears are held in a rigid cast-iron box frame, and cannot get out of alignment. The bearings are extra long and are bored and reamed to gauge in the solid stock. No brass boxes to wear, throwing gears out of line or requiring adjustment. Gears run in oil in a dust-proof case, which can be removed without disturbing the mechanism. Gears are broad and strong, with large properly formed teeth.

LANCASTER GEARED BLACKSMITH BLOWER.



The Champion Lancaster Geared Blower is a well built, cheap, direct driven Blacksmith Blower, which has been built to meet the demand for a cheap Blacksmith Blower.

This Blower, as will be seen by illustration, is supplied with the Champion Adjustable Nozzle Tuyere Iron; it is smooth running, crank turns either way to make the blast and goes out with our recommendation.

The Champion Lancaster Geared Direct Driven Blacksmith Blower, with Fan 12 inches in diameter, Tuyere Iron and Piping complete. Weight 110 lbs.

Price, each $10.50

WESTERN CHIEF POWER BLOWERS.

Shipped from factory.

FAN BLOWER No. F2.

This is a light, neat, power Fan Blower, very desirable for ventilating purposes, and has capacity for two or three forge fires. Suitable for light belting and ordinary use. Has 1¾-inch pulley for belt connections.

Size ..... 16½ inches

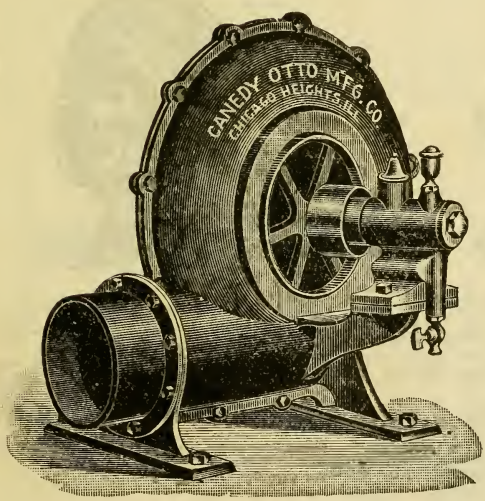
Weight ..... 55 lbs.

Revolutions ..... 1,500 to 2,000

Net price each $7.25

SMALL PRESSURE BLOWERS.

Shipped from factory.



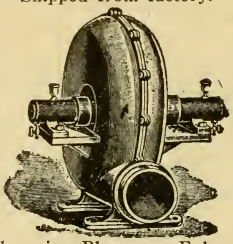
For Forge Fires, Etc.

These Blowers are adapted to forge fires and small, light cupola work. They are very strong and durable, smooth running, and handsome in appearance. Sizes P3, P4 and P5 have grease cup in addition to oil cup, so that should oil cup run dry the grease cup will continue to lubricate and prevent heating. Built for service.

No. of Blower	Height in inches	Diameter of Inlet	Diameter of Outlet	Diameter of Pulley	Face of Pulley	Revolutions per min. 2 oz. Blast for Boiler Fires	Revolutions per min. 4 oz. Blast for Forge Fires	No. of Forge Fires	Sq. ft. of Boiler Grate Surface supplied by Blower	Weight, lbs.	H. P. Required about	Net price each
P 1	10	3¼	2¾	1⅞	1¼	3675	4640	1	2	15	¼	7.00
P 2	15	4½	4¼	3	2	3000	4000	2	5	35	⅓	10.00
P 3	18	5¼	4¾	3	2	2600	3600	5	6	50	1	11.00
P 4	20	6½	5¾	3½	2½	2300	3200	4	8	70	1¼	15.50
P 5	24	7	7½	4⅜	3¼	1928	2680	7	10	105	1¾	18.75

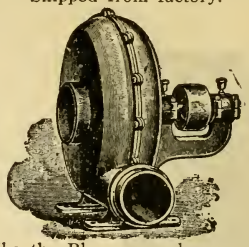
THE CHAMPION BLOWER.

Shipped from factory.



THE CHAMPION EXHAUST FAN.

Shipped from factory.



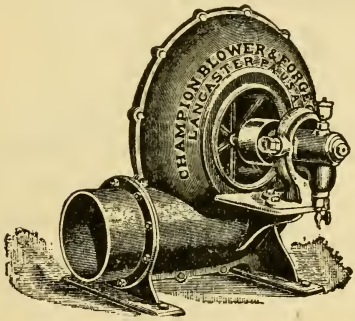
The Champion Blower or Exhaust Fan is constructed like the Blowers used on many of our Forges and Hand Blowers. While they are built in the most practical manner for hand power, for steam power we can only recommend them where a light current of air is required. They are built to meet a demand for a cheap Power Blower and Exhaust Fan.

This blower is intended for blowing fires in portable and small stationary boilers, also for forge fires and various purposes where a small current of air is desired, and the Exhaust Fan is also intended for light work.

			Net price each
No. 0	Champion Blower.	10 in. high. Will blow one fire	$5.00
No. 00	Champion Blower.	14 in. high. Will blow two ordinary fires	6.00
No. 000	Champion Blower.	16½ in. high. Will blow three ordinary fires	7.00
No. 01	Champion Exhaust Fan.	10 in. high	6.00
No. 002	Champion Exhaust Fan.	14 in. high	7.00
No. 0003	Champion Exhaust Fan.	16½ in. high	8.25

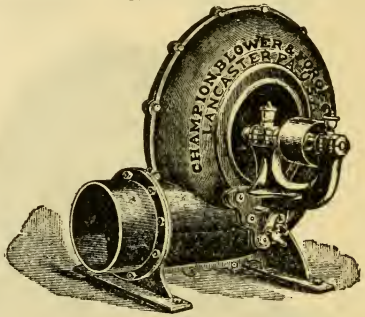
THE CHAMPION FAN BLOWER.

Shipped from factory.



THE CHAMPION EXHAUST FAN.

Shipped from factory.



The Champion Fan Blowers are built especially for use where a large volume of blast is required (instead of great pressure), and are adapted for Steam Boilers, Puddling, and Heating Furnaces, Dry Rooms, Refrigerators and Forge Fires, etc.

The Champion Exhaust Fans as shown above are constructed and especially adapted for ventilating rooms, removing dust from Emery Wheels, Buffing Machines and exhaust smoke from Blacksmith Shops, etc.

The Champion Fan Blower and Exhaust Fan are constructed in the best possible manner from the highest grade of material, and by first-class workmen.

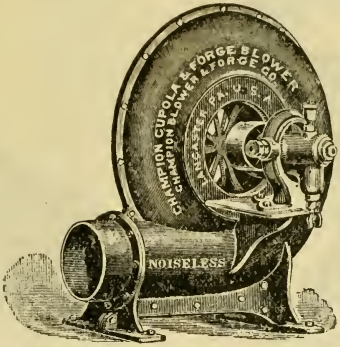
Price List with Sizes, Dimensions, Table of Speed and Capacities of the Champion Fan Blower and Exhaust Fan:

No. Blower and Exhaust Fan	Net Price each	Height in inches	Inside Diameter of Inlet	Inside Diameter of Outlet	Diameter of Pulley	Face of Pulley	Revs. per min. 2-ounce Blast for Boiler Fires	Revs. per min. 4-ounce Blast for Forge Fires	No. of Forge Fires	Sq. ft. of Boil r Grate Surface Supplied by Blower
½	$ 8.00	12	4½	3½	2 5/16	1¾	3,300	4,500	1	3½
1	10.00	15	5	4	3	2	3,000	4,000	2	5
2	13.35	18	5¾	4¾	3	2½	2,600	3,600	4	6
3	16.65	21½	6½	5¾	3½	2½	2,300	3,200	6	8
4	22.00	25½	7½	7½	4¼	3½	1,928	2,682	9	10
5	29.50	29¼	9	9	5⅛	4	1,638	2,279	15	14
6	41.25	34	10½	10½	6	4¾	1,410	1,961	18	20
7	52.50	40	12	12	6⅓	5¼	1,194	1,662	24	27
8	60.00	45	14	14	8	6½	1,018	1,417	30	36
9	100.00	50	16	16	9	8	878	1,234	40	48
10	134.00	57	18	18	10	9	766	1,065	52	62

THE CHAMPION STEEL PRESSURE BLOWER.

Shipped from factory.

For Cupola Forges and Furnaces.



The Champion Steel Pressure Blower is especially adapted for Foundry Cupolas, Furnaces, Machine Shops, Forge Fires, Sand Blast Machines, or any work requiring forcing of air long distances, high pressure or strong blast. In locating Blower always place same as near cupola as possible. Avoid right angles or abrupt turns in blast pipes. Will produce a stronger Blast with same amount of power, than any other Blower.

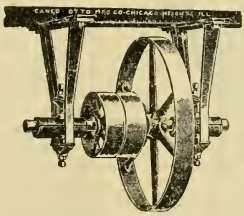
Price List with Sizes and Dimensions of the Champion Steel Pressure Blower:

Height in inches	No. Blower	Net Price without Counter-Shaft	Diameter of Pulley in inches	Face Pulley in inches Inside.	Diameter of Outlet	Diameter in inches Inside of Cupola	Melting Capacity per Hour in lbs.	Speed No. of Rev. for Melting Iron	Pressure of Blast in Ounces	No. Forge Fires	Rev. per Minute for Forge Fires
12	½	$ 8.00	1⅞	1⅜	2¾	..	.....	....	..	1	4,300
15	1	13.50	2½	2	3⅜	..	.....	....	..	2	4,200
20	2	19.50	3	2¼	4¼	..	.....	....	..	4	4,000
24	3	24.00	3⅜	2½	4¾	22	1,300	4,150	5	6	3,725
26	4	30.00	3⅞	2¾	5¼	26	2,000	3,790	6	9	3,103
30	5	34.00	4½	3⅛	6¼	30	2,900	3,275	7	15	2,456
35	6	42.00	4⅞	3½	7½	35	4,000	3,050	8	18	2,224
40	7	55.00	5¾	3¾	8¾	40	6,000	2,900	10	24	1,814
45	8	70.00	6¾	4½	10¼	46	8,600	2,820	12	30	1,619
53	9	92.00	7¾	5½	11⅞	53	12,300	2,600	14	40	1,344
64	10	126.00	9	6⅛	13⅞	60	16,500	2,270	15	52	1,200

WESTERN CHIEF COUNTERSHAFTS.

Shipped from factory.

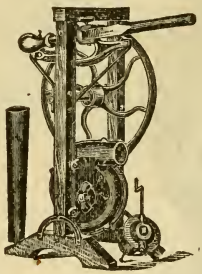
For Pressure Blowing, Etc.



SIZES	Driving Pulley		Tight and Loose Pulleys		Diameter of Shaft	Weight	Net Price each
	Diameter	Width	Diameter	Width			
P 1	10¾ in.	2½ in.	4 in.	2 in.	⅞ in.	50 lbs.	$ 6.00
P 3	14 in.	2¾ in.	6 in.	2½ in.	1⅛ in.	60 lbs.	9.00
P 5	18 in.	3½ in.	7 in.	3¾ in.	1⅜ in.	75 lbs.	12.00

CHAMPION LEVER BLACKSMITH BLOWER.

Shipped from factory.



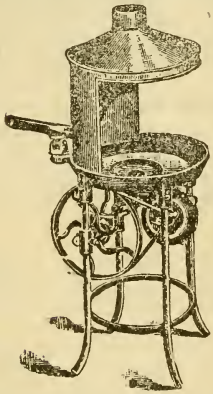
Fan 16-in., fly-wheel 28 in. in diameter.

Has the capacity of a 50 in. bellows, with patent adjustable nozzle tuyere iron and piping complete.

The mecahnical self-acting and simple lever motion has nothing to get out of order, and is absolutely perfect in its construction, durable and light running, with a continuation of momentum between strokes, keeping the blast regular and powerful. Every blower warranted.

Net price, complete, with patent adjustable nozzle tuyere iron and piping....$8.25

CHAMPION LEVER FORGE.

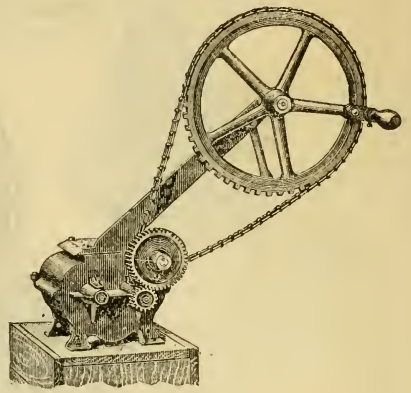


No. 151 With Half Hood.

Net price each

No. 151 Champion Agricultural Lever Forge with Half Hood. Hearth 18 in. Diam., 4 in. deep. Fan 8 in. Diam., Height 30 in. Weight, 70 lbs.....$7.00

ACME HAND BLOWER.



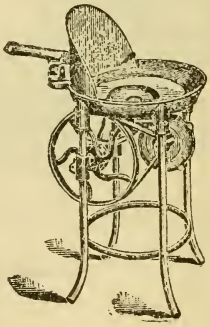
Guaranteed to Give a Blast Equal to a 60-in. Bellows.

Sizes. Net price each.

No. 3, without tuyere iron.....$16.00

THE CHAMPION AGRICULTURAL LEVER FORGE.

Size of Hearth 18 in. in Diameter. Fan 8 in. in Diameter.



No. 150. With Shield.

The Nos. 150 and 151 Agricultural Lever Forges are precisely what illustrations represent them to be. They have been on the market for ten years. A great many have been sold on account of the low price. The Lever motion is operated by three (3) ratchet pawls, with gear segments as illustration shows. They are recommended as the largest Forge for the money ever built. Size of hearth 18 inches in diameter, 4 inches deep. The construction of the two Forges is precisely the same with the exception that the No. 150 has a shield and the No. 151 has Half Hood. They are highly recommended for farmers' use, and for light repair work.

Net price each.

No. 150 Champion Agricultural Lever Forge with Shield. Hearth 18 in. Diam., 4 in. deep. Fan 8 in. Diam., Height 30 in. Weight, 65 lbs.....$6.00

CHALLENGE FORGE.

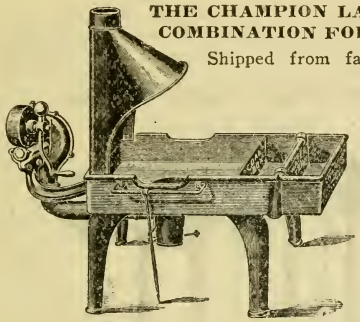
Shipped from factory.

This Forge has a capacity to heat iron two inches through, and very desirable for all kinds of outdoor work, where a light, strong portable forge is required. It is equipped throughout with Brass Boxes and Oil Cups, also noiseless steel Friction Clutch.

Fan 9 inches. Height, 33 inches.
Hearth 22 inches. Weight, 95 pounds.
Sizes, No. 4C.....Net price, each, $8.50

THE CHAMPION LARGE COMBINATION FORGE.

Shipped from factory.



The Champion Large Combination Forge shows a new and larger Blacksmith Forge than ever was built heretofore. Finding a demand for a Forge of this magnitude we, as progressors in the improvement of the Blacksmith's wants, have determined to furnish a Forge for the heaviest kind of railroad work, plow work, heavy wagon work, or any blacksmith making heavy work a specialty. This Forge is supplied with a hearth 38 x 52 inches and 6 inches deep for building up with fire brick.

No. 430 Champion Large Combination Blacksmith Forge. Size of Hearth over all 38 x 52 in., Height 26 in., Diameter of Fan 12 in., with Hood and Water Tank Complete, and No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron. Weight, 450 lbs.....$36.00

No. 431 Champion Large Combination Blacksmith Forge. Size of hearth over all 39 x 63 in. Height, 26 in. Diameter of Fan 14 in., with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron, also Hood and Water Tank, Complete. Weight, 525 lbs.
Net price each.....$40.00

No. 432 Champion Large Combination Blacksmith Forge. Size of hearth over all 39 x 63 in. Diameter of Fan 16 in., with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron, with Hood and Water Tank, Complete. Weight, 625 lbs. Net price, each.....$42.00

CHALLENGE FORGES.

Shipped from factory.

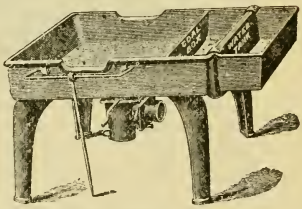
These Forges have a capacity to heat 2-inch iron, and are very desirable for toolmakers, plumbers, tinsmiths, locksmiths, dentists, and small hardware work, heating and tempering tools, etc.

Fan 9½ inches.
Height, 33 inches.
Hearth, 22 inches.
Weight, 90 pounds.

Net price each.
Sizes. No. 5C....$9.50

THE CHAMPION STATIONARY BLAST FORGE.

Shipped from factory.



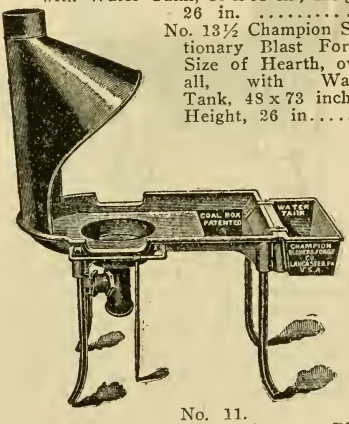
Nos. 12, 12½ and 13½ Champion Stationary Blast Forges are made extra heavy for all kinds of blacksmith fires, far superior to building a Forge of brick or stone, are made for power, but can be used for hand power or bellows as well. This Forge is supplied with the Champion Blast Gate.

Net price each.

No. 12 Champion Stationary Blast Forge. Size of Hearth, over all, with Water Tank, 38 x 52 in., Height 26 in. $17.50

No. 12½ Champion Stationary Blast Forge. Size of Hearth, over all, with Water Tank, 39 x 63 in., Height 26 in. $20.00

No. 13½ Champion Stationary Blast Forge. Size of Hearth, over all, with Water Tank, 48 x 73 inches. Height, 26 in.....$35.00

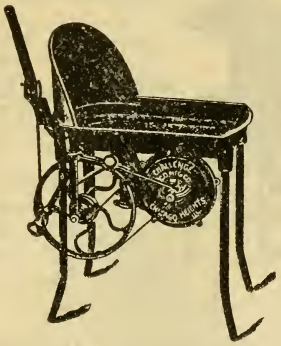


No. 11.

No. 11 Champion Stationary Blast Forge. Hearth, 32 x 45 in., Height 30 in., with Hood and Water Tank complete $14.00
With Hood, less Tank 12.00
With Tank, less Hood 12.00
Less Hood and Tank..... 10.00

CHALLENGE FORGES.

Shipped from factory.



This Forge has capacity for heating 3-inch iron and is especially adapted to the requirements of boilermakers, bridge builders, well drivers, miners, railroad and outdoor work. Has a perfect Tuyere Ball and blast, and size and shape of hearth permits ample room for coal and place to lay tools upon. Everything for the convenience of the workman.

Fan 12½ inches. Height, 30 inches.

Hearth, 35 x 23 inches. Weight, 130 lbs.

Sizes. Net price each.

No. 2C.....$12.82

CHALLENGE FORGES.

Shipped from factory.

This Forge is adapted to the largest, heaviest work. It has a perfect Fire Pot, with W. C. Goose Nest to securely hold clay; also Tuyere Ball, furnishing side and center blast, all separate and distinct from Hearth, and arranged to withstand the intense heat. It is equipped with Brass Boxes and Oil Cups throughout, also Noiseless Steel Friction Clutch. This Forge can be furnished reversed, to operate with right arm, for left-handed smiths, when desired.

Fan 14½ inches. Height, 30 inches.

Hearth, 33½ x 46 inches. Weight, 300 pounds.

Length over all, 54 inches.

Sizes. Net price each.

No. 1C, without Water Tank.....$17.81

No. 1C, with Water Tank..... 19.60

CHALLENGE FORGES.

Shipped from factory.

This forge has a capacity for heating 3-inch iron, and is specially adapted to the requirements of machinists, plumbers, railroad repair shops, locksmiths, etc. Has a perfect Tuyere Ball and blast, and size and shape of hearth permits ample room for coal and place to lay tools upon. Everything for the convenience of the workman.

Fan 12½ inches. Height, 30 inches.

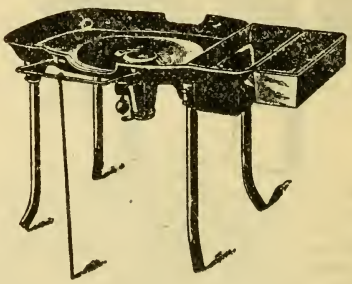
Hearth 35 x 23 inches. Weight 135 pounds.

Sizes. Net price each.

No. 3C.....$14.25

WESTERN CHIEF FORGES.

Shipped from factory.



A Stationary Blast Forge of size and construction suitable for all requirements of ordinary shop use.

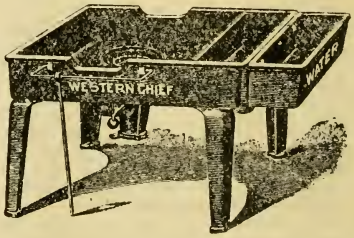
Hearth 33½ x 46 inches. Height 30 inches.

Length over all 54 inches.

Sizes. Net price each.

AA, Plain (1 tank only).....$10.40

AA, (extra water tank)..... 12.50



Very large, heavy and strong, is cheaper and much handsomer than a brick or stone forge.

Sizes. Net price each.

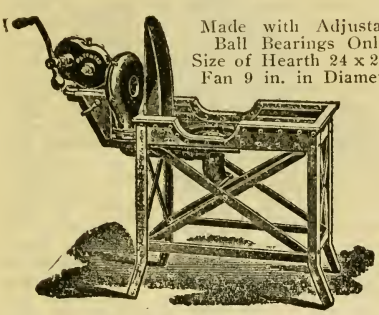
BB, Plain (no extra tank).....$14.55

BB, (with water tank)..... 16.62

THE CHAMPION STEEL RIVET FORGE.

Shipped from factory.

Made with Adjustable Ball Bearings Only.
Size of Hearth 24 x 24 in.
Fan 9 in. in Diameter.



No. 404. With Shield.

Nos. 404 and 405 Champion Steel Rivet Forges have a 24-inch square hearth with angle steel legs riveted fast to hearth, as above cut shows. In construction of machinery for operating the blower in connection with size of fan, this Forge is precisely the same as No. 401. The only difference in the Forges being the hearth on the No. 401 is 18 inches in diameter and on this Forge 24 inches square. For many kinds of work this 24-inch square Forge may be preferable. The hearth being larger, naturally there is more surface for fire, coal, tools.

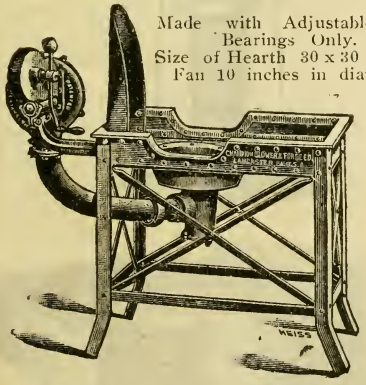
Sizes. Net price each.

No. 404, Champion Steel Rivet Forge with Shield. Hearth 24 x 24 in., Height 30 in., Fan 9 in. diameter, Weight 110 lbs. $20.25

THE CHAMPION STEEL BOILER-MAKERS' FORGE.

Shipped from factory.

Made with Adjustable Ball Bearings Only.
Size of Hearth 30 x 30 inches.
Fan 10 inches in diameter.

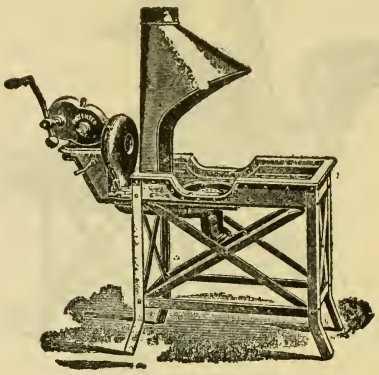


No. 406. With Shield.

No. 406, Champion Steel Boilermakers' Forge with Shield. Hearth 30 x 30 in., Height 30 in., Fan 10 in. diameter, Weight 160 lbs. $24.75
With Water Tank, extra..... 3.00

THE CHAMPION STEEL TOOL-MAKERS' FORGE.

Shipped from factory.
Made with Adjustable Ball Bearings Only.
Size of Hearth 24 x 24 inches.
Fan 9 inches in diameter.



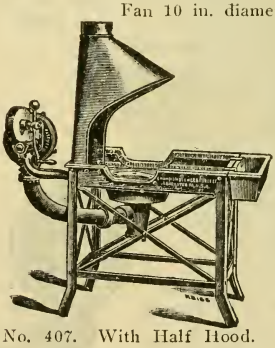
No. 405. With Half Hood.

Sizes. Net price each.

No. 405, Champion Steel Toolmakers' Forge with Half Hood. Hearth 24 x 24 in., Height 30 in., Fan 9 in. diameter, Weight 120 lbs.....$22.05

THE CHAMPION STEEL MACHINISTS' FORGE.

Shipped from factory.
Made with Adjustable Ball Bearings Only.
Size of Hearth 30 x 30 in.
Fan 10 in. diameter.



No. 407. With Half Hood.

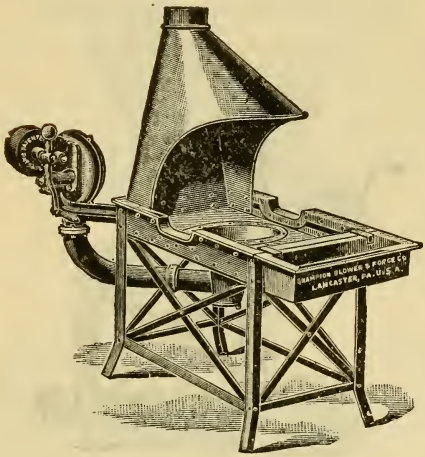
Nos. 406 and 407 Champion Steel Boilermakers' Forges have a 30 inch Square Hearth and Fan 10 in. in diameter. The light running and noiseless machinery for operating the Blower for producing the blast is our marvelous high-speed spiral movement, fully described and guaranteed on page 45. The powerful blast it produces, with the lightness in operation, can only be appreciated when seen at a fire; there being no belts or friction, with all machinery closed in an oil-tight casing and every journal being fitted up with adjustable ball bearings.

Net price each.

No. 407, Champion Steel Machinists' Forge with Half Hood. Hearth 30 x 30 in., Height 30 in., Fan 10 in. diameter, Weight, 175 lbs.....$27.00
With Water Tank, extra..... 3.00

THE CHAMPION STEEL HORSESHOERS' FORGE.

Shipped from factory.
Made with Adjustable Ball Bearings only.
Size of Hearth 30x36 Inches. Fan 12 Inches in Diameter.



The No. 408 Champion Steel Horseshoers' Forge is virtually the No. 400 Champion Steel Blower on page 42, converted into a most practical and complete up-to-date Horseshoers' or Blacksmiths' Forge ever built. The No. 408 Forge is now on the market in its fourth year and has won for itself friends in all nations, among horseshoers and general blacksmiths. It is built from structural steel with perpendicular sides 6 inches wide, making the hearth 6 inches deep, rendering it in every particular the most practical forge hearth ever built. We recommend the No. 408 Forge as substantial and as firm as any blacksmith can build. As will be understood, the Blower used on this Forge is precisely the same as the No. 400 Blower illustrated on these pages, the mechanical construction of this Blower being the highest possible to reach in the construction of machinery. For a full explanation of the Spiral Gearing used on the No. 408 Forge read above. The crank turns either direction to make the blast. It will make a white heat blast, guaranteed equal to the best power blast. Its parts are all machine cut from the very highest grade of tool steel and phosphor bronze. Its Ball Bearings are all adjustable and the finest that can be manufactured.

No. 408. With Half Hood.

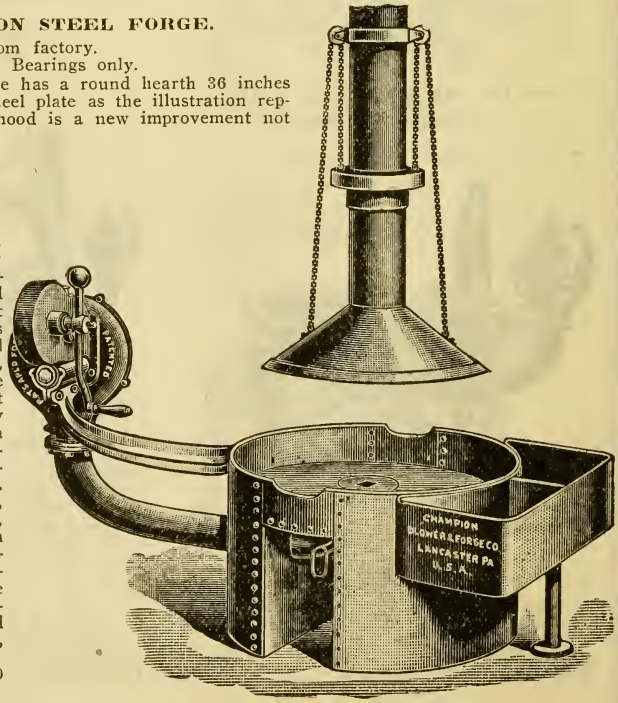
No. 408 Champion Steel Horseshoers' Forge, with Half Hood. Hearth 30x36 inches. Height 30 inches, Fan 12 inches in diameter, with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron. Weight 250 lbs. Net price each....$29.25
With Water Tank, net price each..... 31.50

No. 409 Champion Steel Blacksmiths' Forge. Hearth 30x40 inches, Height 30 inches, Fan 12 inches in diameter, with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron. Weight 275 lbs. Net price each..... 31.50
With Water Tank, net price each .....*..... 33.75

THE CHAMPION STEEL FORGE.

Shipped from factory.
Made with Ball Bearings only.

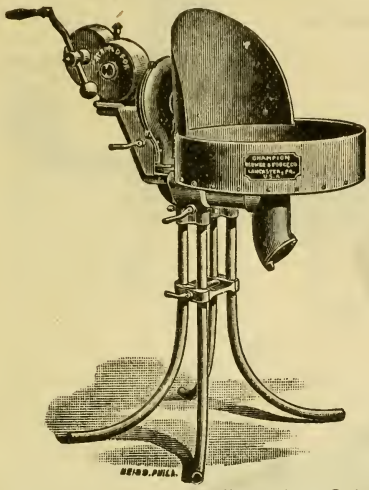
No. 410 Champion Steel Forge has a round hearth 36 inches in diameter, constructed from steel plate as the illustration represents. The telescope canopy hood is a new improvement not found on hand Forges before. It no doubt will be highly favored and appreciated in railroad shops, carriage or wagon shops, or any place that a large variety of work is done, as it can be raised high enough to place a large tire under it in the fire for welding, or lowered to the pleasing of any operator. The Hood being counter-balanced by a cast iron ring around the pipe, makes it easy to raise or lower and will remain in without any fastening, at any height desired, by the mechanic. We will guarantee it to produce a blast equal in every respect to a blast produced by a blower run by power, with one-fourth the labor required heretofore to make an ordinary blast.



No. 410 Champion Steel Forge, Hearth 36 in. in diameter, Height 30 in., Fan 12 in. in diameter, with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron. With Telescopic Canopy Hood. Water tank and Coal Box, Complete. Weight, 450 lbs.
Net price each.....$44.00

THE CHAMPION STEEL RIVET FORGE.

Shipped from factory.



Made with Adjustable Ball Bearings Only.

No. 401. With Shield.

Hearth 18 inches in Diameter.

Fan 9 inches in Diameter.

No. 401 Champion Steel Forge is truly an ingenious and great invention, for both employer and employe. The marvelous direct drive Spiral High Speed Mechanical Movement for producing a wonderful, regular, continuous and positive blast, with such great ease, can indeed be easily classed as a wonder of the 20th century. Nothing was ever seen to even approach it for a strong, positive, regular blast. The Forge is constructed from structural steel, making it strong, stiff and light. The machinery is all enclosed in an oil-tight casing, and entirely noiseless. It has no belts, no small gears or friction. It is fitted up all through with Adjustable Ball Bearings. It can be taken apart for transportation and again set up for use in a few moments. This Forge is adapted for boilermakers and repairers, Elevated and Steam Railroads, Bridge and Tank Builders, Miners and Prospectors, for Government use, Race Horse Shoeing, or any portable work requiring compactness and lightness, with a strong blast. If necessary it will produce blast to weld 3½ to 4 inch iron in ten minutes. The crank to produce the blast can be turned either way.

Net price each

No. 401, Champion Steel Rivet Forge with Shield. Hearth 18 in. diameter, Height 30 in., Fan 9 in. diameter, Weight 90 lbs.....$15.75

No. 402, Champion Steel Toolmakers' Forge with Half Hood. Hearth 18 in. diameter, Height 30 in., Fan 9 in. diameter, Weight 90 lbs..... 17.10

No. 403, Champion Steel Toolmakers' Forge, with Closed Hood. For use where combustible material is kept. Hearth and fan are same as above, Weight 100 lbs..... 18.00

Nos. 401½, 402½ and 403½ Champion Steel Forges are precisely the same in their entire construction as the Nos. 401, 402 and 403, excepting the Hearth, which is much larger, being 22 inches in diameter.

Nos. 401¾, 402¾ and 403¾ Champion Steel Forges are in their entire construction same as all the above forges, with the exception of a larger Hearth and larger Fan, the Hearth being 24 and the Fan 10 inches in diameter, which makes this a very light and compact Forge for large or heavy work.

No. 401½, Champion Steel Forge with Shield. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 100 lbs.....$18.00

No. 402½, Champion Steel Forge with Half Hood. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 105 lbs.. 19.35

No. 403½, Champion Steel Forge with Full Hood. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 110 lbs.. 20.25

No. 401¾, Champion Steel Forge with Shield. Hearth 24 in. diameter, Fan 10 in. diameter, Height 30 in., Weight 110 lbs. 20.25

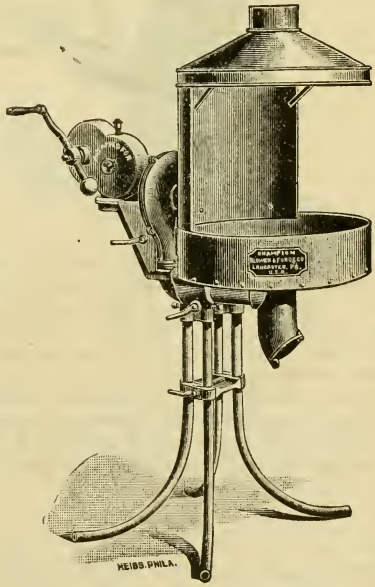
No. 402¾, Champion Steel Forge, same as above with Half Hood, Weight 115 lbs. 21.60

No. 403¾, Champion Steel Forge, same as above with Full Hood, Weight 120 lbs. 22.50

ALL GUARANTEES ON THE NO. 400 STEEL BLOWER APPLY TO THESE FORGES.

THE CHAMPION STEEL TOOLMAKERS' FORGE.

Shipped from factory.



No. 402. With Half Hood.

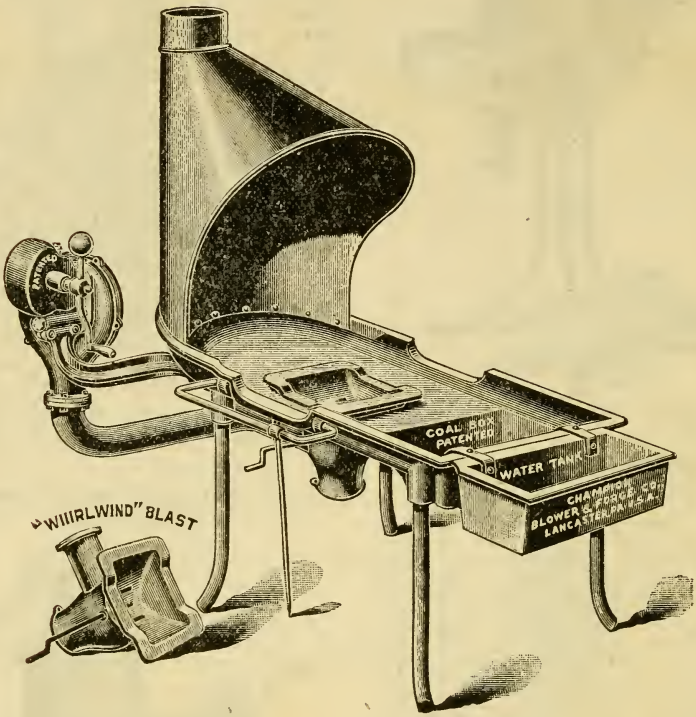
Made with Adjustable Ball Bearings Only.
Size of Hearth 18 inches in Diameter.
Fan 9 inches in Diameter.

THE CHAMPION CAST IRON HEARTH BLACKSMITH FORGE.

Shipped from factory.

Made with Ball Bearings only.

Size of Hearth 32x45 inches. Fan 12 inches in diameter.



No. 433. With Half Hood.

No. 433 Champion Cast Iron Hearth Blacksmith Forge is a new Forge and carries with it all the improvements and advantages that can possibly be had in a Cast Iron Blacksmith Forge hearth. The Blower used on this Forge is the Famous No. 400 Champion "Patented" High-speed Spiral Gearing and Blower. The capacity of this Forge is sufficient for any Blacksmith work, and we recommend it for the heaviest as well as the lightest work that is done in a general blacksmith shop. It is supplied with the No. 400 Champoin "WHIRLWIND" Blast Anti-Clinker Heavy Nest Tuyere Iron (shown and described on page 38) *without extra cost.* It is also supplied with our Champion "Patented" Sloped Bottom Coal Box, which is entirely out of the way, as it is beneath the level of the bottom of the hearth, which is very convenient for keeping the coal in any degree of dampness that the operator desires.

Net price each

No. 433 Champion Cast Iron Hearth Blacksmith Forge. Hearth 32x45 inches, Fan 12 inches in diameter, with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron. Weight 275 lbs. $24.75

With Water Tank, Weight 325 lbs. 27.00

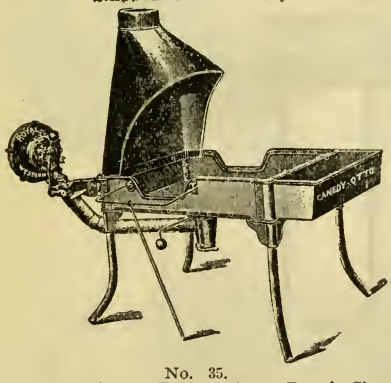
ROYAL WESTERN CHIEF FORGE.

Shipped from factory.

No. 100.
For use of Large Blacksmith, Wagon, Plow, Railroad Shops, Etc., where Heavy Work is done, and a first-class Forge and Fire are needed.
Fan, 12 inches. Height, 30 inches.
Hearth, 31½x45½ in. Length over all, 53 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style of Blower with Western Chief Standard Hearth, having Solid Fire-pot with Tuyere Ball furnishing side and center blast. We guarantee it fully. Net price each
With One Tank, weight 295 lbs.....$22.50
With Extra Tank (as illustrated), weight 325 lbs. 24.75
(Always shipped WITHOUT EXTRA TANK, unless so ordered.)

ROYAL STEEL FORGE.

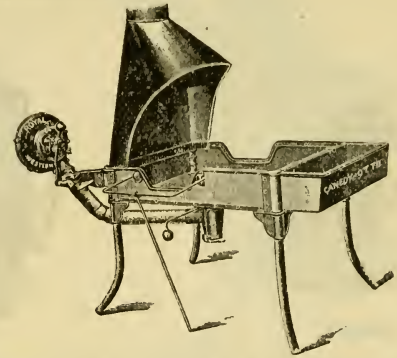
Shipped from factory.



No. 35.
For Horseshoers, Boilermakers, Repair Shops, etc.
Fan, 12 inches. Height, 30 inches.
Hearth, 30x36 in. Length over all, 44 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style of Blower, with Steel Hearth, having Solid Fire-pot with Tuyere Ball furnishing side and center blast. Net price each
Without Tank, weight 195 lbs.....$27.00
With Tank (as illustrated), weight 225 lbs. 29.25
(Always shipped WITHOUT TANK, unless so ordered.)

ROYAL STEEL FORGE.

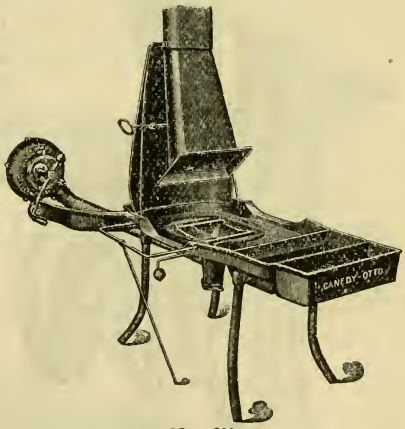
Shipped from factory.



No. 15.
For Blacksmiths, Wagon and Plow Shops, Etc.
Heavy and Light Work.
Fan, 12 inches. Height, 30 inches.
Hearth, 30x40 in. Length over all, 48 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style of Blower, with Steel Hearth, having Solid Fire-pot with Tuyere Ball furnishing side and center blast. Net price each
Without Tank, weight 215 lbs.....$29.25
With Tank (as illustrated), weight 245 lbs. 31.50
(Always shipped WITHOUT TANK, unless so ordered.)

ROYAL WESTERN CHIEF FORGE.

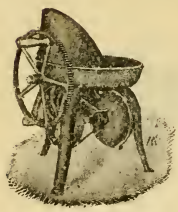
Shipped from factory.



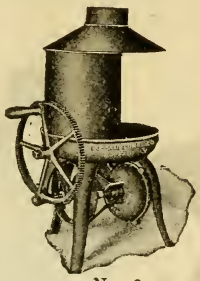
No. 200.
With Improved Smoke Conveyor, Royal Blower and Western Chief Standard Hearth.
Fan, 12 inches. Height, 30 inches.
Hearth, 31½x45½ in. Length over all, 53 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style of Blower with Western Chief Standard Hearth, having Solid Fire-pot with Tuyere Ball furnishing side and center blast. We guarantee it fully. Net price each
With One Tank, weight 300 lbs.....$24.75
With Extra Tank (as illustrated), weight 330 lbs. 27.00
(Always shipped WITHOUT EXTRA TANK, unless so ordered.)

BUFFALO BENCH FORGES.

Shipped from Factory.



No. 7.



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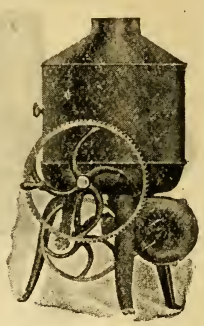


No. 9.

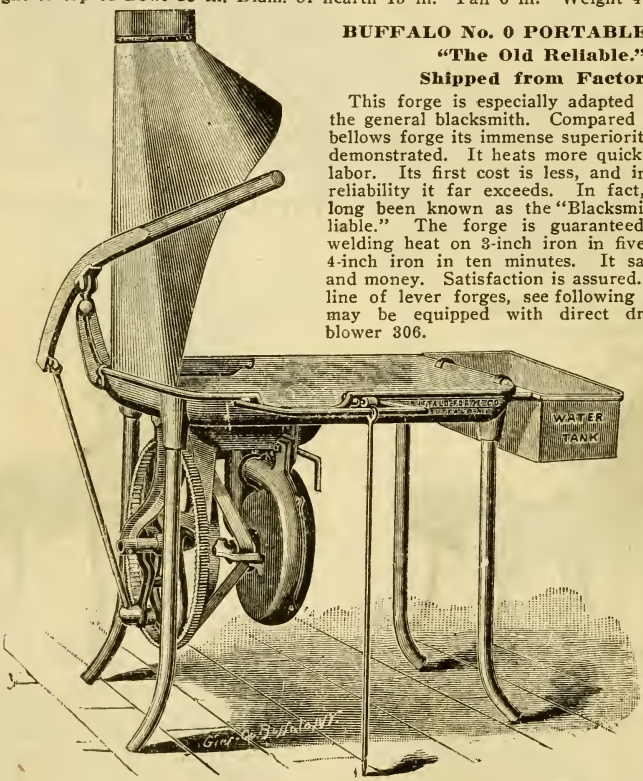
				Net price each.
No. 7	Height to top of Bowl 15 in.	Diam. of hearth 15 in.	Fan 6 in.	Weight 40 lbs.....$6.40
No. 8	Height to top of Bowl 15 in.	Diam. of hearth 15 in.	Fan 6 in.	Weight 42 lbs..... 7.20
No. 9	Height to top of Bowl 15 in.	Diam. of hearth 15 in.	Fan 6 in.	Weight 43 lbs..... 8.00

BUFFALO No. 0 PORTABLE FORGE.

"The Old Reliable."

Shipped from Factory.

This forge is especially adapted to the needs of the general blacksmith. Compared to the brick and bellows forge its immense superiority was years ago demonstrated. It heats more quickly and with less labor. Its first cost is less, and in durability and reliability it far exceeds. In fact, this forge has long been known as the "Blacksmiths' Old Reliable." The forge is guaranteed to produce a welding heat on 3-inch iron in five minutes or on 4-inch iron in ten minutes. It saves time, room and money. Satisfaction is assured. For the entire line of lever forges, see following pages. No. 0 may be equipped with direct drive lever gear blower 306.



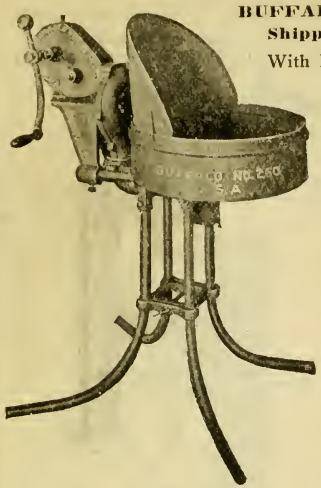
BUFFALO BLACKSMITHS' FORGE No. 0.

Net price without tank	$20.00
Net price with tank	21.60
Height to top of bowl	32 inches
Size of hearth	28x40 inches
Diameter of fan	14 inches
Weight without tank	255 pounds
Weight with tank	270 pounds

BUFFALO RIVET FORGES.

Shipped from Factory.

With Ball Bearing Blowers.



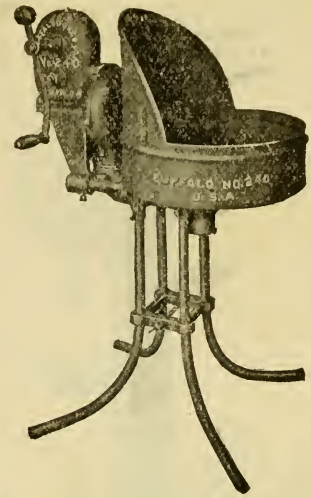
Buffalo Forge No. 260.

Net price each.

No. 260. Height to top of bowl 32 in., Diameter of Hearth 18 in., Depth of Bowl 6 in., Diameter of Fan case 9 in. Weight 125 lbs.....$14.00

An innovation, readily taken apart and re-assembled.

Cut spur and spiral gears. Made of finest hardened phosphor bronze and Swiss steel, run in oil-cloth, in dust-proof cases. Will produce a welding heat on a 4-inch iron in less than 10 minutes.



Buffalo Forge No. 240.

Net price each.

No. 240. Height to top of Bowl, 33 in., Diameter of Hearth, 18 in., Diameter of Bowl 6 in., Diameter of Fan case, 9 in. Weight 125 lbs.....$14.00

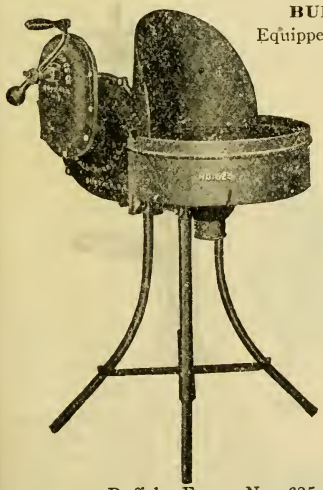
Both Forges have the latest Buffalo Ball Bearing Blower, a design backed by 35 years' experience in Forge and Blacksmith Tool construction.

Strength, Durability, Noiseless, Light Weight, Handle turns either way.

BUFFALO PORTABLE FORGES.

Equipped with the Buffalo No. 200 Blower.

Shipped from Factory.

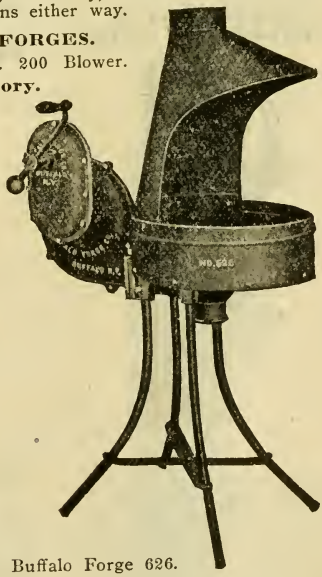


Buffalo Forge No. 625.

Net price each.

No. 625. Height to top of Bowl, 32 in., Hearth 18 in. diameter, Weight, 140 lbs. $14.00

Forge No. 625 is built especially for rivet heating. All parts detachable, assembled in five minutes. Made of sheet steel, it is practically indestructible.



Buffalo Forge 626.

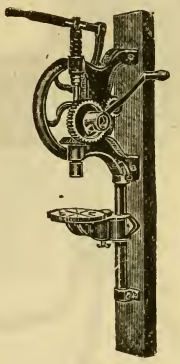
Net price each.

Forge No. 626 is similar to the 625, but No. diameter. Weight 150 lbs.....$15.20

Forge No. 626 is similar to the 625, but No. 626 is fitted with the Half Open Hood.

BLACKSMITHS' DRILLS.

CHAMPION LEVER FEED.

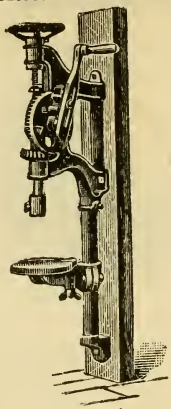


No. 100 Drill

Is designed and built for light and quick work, intended to be used as a second drill in all up-to-date shops where tire drilling and countersinking is an object. Drills to center of 14-inch circle. Spindle has an up and down run of 5 inches. Drills 0 to ¾ inch, takes ½ inch straight shank drills. Weight 100 lbs.

Net price each.....$7.50
Extra for power..... 2.00

SILVER SINGLE GEARED HAND FEED.



No. 1½

Drills 4-inch and to center of 12-inch circle. Drill spindle is 1 inch steel, same as No. 2, and bored for ½-inch straight drills.

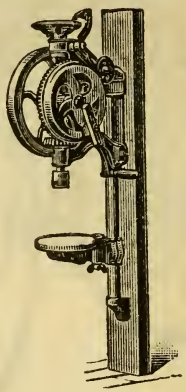
Feed has run of 3 inches.

Upright column and feed screws are of best steel.

A good substantial drill, well made of the best materials, and capable of doing the work of more expensive machines. Weight 55 lbs.

Net price each.....$4.00

SILVER DOUBLE GEARED SELF FEED.



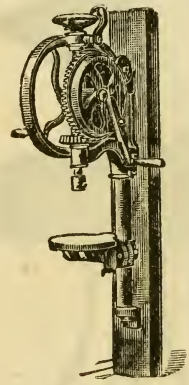
No. 2

Has extension crank and adjustable feed. Drills 0 to 1-inch holes, and to center of 14½-inch circle. Drill spindle bored for ½-inch straight shank drills. Feed has run of 3 inches. Upright column, drill spindle and feed screw are of best steel.

Weight 100 pounds.

Net price each.....$6.50

SILVER DOUBLE GEARED SELF FEED.

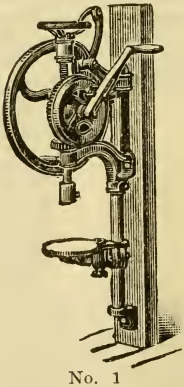


No. 3

Has extension crank and variable feed. Drills 0 to 1¼-inch holes, and to center of 16-inch circle. Drill spindle bored for ½-inch straight shank drills. Feed has run of 3 inches. Upright column drill spindle and feed screw are of best steel. Weight 140 pounds.

Net price each.....$8.50

SILVER DOUBLE GEARED SELF FEED.



No. 1

Has extension crank and adjustable feed. Drills ¾-inch and to center of 12-inch circle. Drill spindles are 1-inch steel, same as No. 2, and bored for ½-inch straight shank drills.

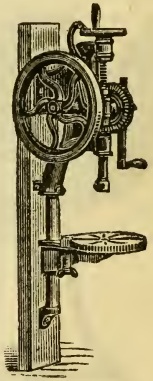
Feed has run of 3 inches.

Upright column and feed screws are of best steel.

Weight 80 pounds.

Net price each.....$5.50

SILVER ADVANCE.



No. 12 Drill

Size of spindle 1 inch, run of spindle 3 inches, size of column $1\frac{9}{16}$ inch, greatest distance of spindle to table 14¼ inches. Fast and slow speed. Drill to center of 15-inch circle, and up to 1¼-inch holes. Spindle bored for ½-inch round shank drills.

Weight 125 pounds.

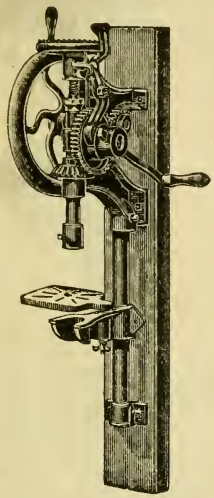
Net price each.....$7.00
Extra for power.....2.00

BLACKSMITHS' BENCH DRILL.

Net price each

Blacksmiths' Bench Drill $1.60

CHAMPION SELF-FEED DRILL.



No. 90.

Self-feed, will drill to center of a 14½-inch circle. It has but one speed, has back gears and will drill a hole from 1-64 to 1 inch. The bearings are all ground to a working fit out of solid metal. Spindle is bored to take in ½-inch straight shank drills. Weight 100 pounds.

Net price each $6.50
Extra for power 2.00

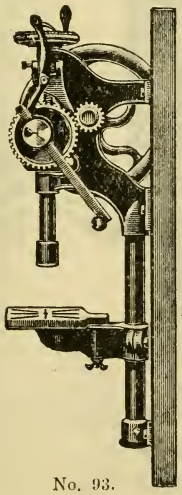
CHAMPION SELF-FEED DRILL.

Drills to center of 15 inch circle. Has Double Journal Bearings to all working parts. Has full back gear. Has two speeds. Drills 1-64 to 1¼ inch hole. Diameter of spindle 1⅛ inch and up and down run of 3 inches. Spindle bored to take in ½-inch straight shank drills.

Weight 125 lbs.

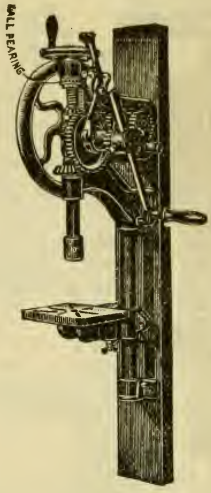
Net price each.....$8.00

Extra for power.... 2.00



No. 93.

THE NEW CHAMPION BALL BEARING.



Self-Feed Blacksmith Post Drill.

Drills to center of a 16-inch circle. Weight 130 pounds. It is back geared, with our improved third-gear principle, which gives the second speed the same crank motion as on the first speed. Has double journal bearings to all working parts. Has spindle 1¼ inch in diameter. This screw has an up and down run of 3½ inches. The spindle bored to take in ½-inch straight shank drills. Will drill from 1-64 to 1¼ inch hole.

Net price each $9.00
Extra for power 2.00

LITTLE GIANT.

A Strong, Serviceable Drill.

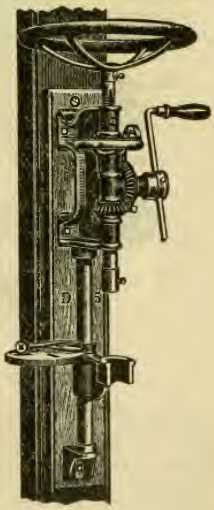
Compact and thoroughly well made machine in every particular. Guaranteed to give satisfaction.

General Dimensions.

Drills to 1 in. diameter hole. Drills to center of 14-inch circle. Swinging table easily adjustable to height.

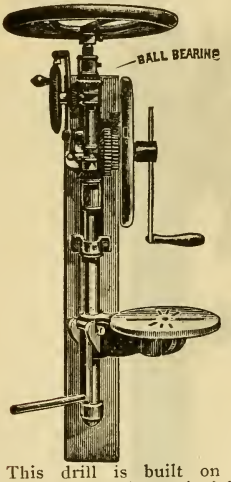
Spindle is made of steel, and has Tool Steel Set Screw hardened and tempered. Spindle receives ½-inch shank drills.

Weight 90 pounds.
Net price each, $7,25



No. D-5.

CHAMPION NEW BALL BEARING BLACK DIAMOND.



This drill is built on a new and scientific principle, being a tool with merits worth looking into by all who are in want of a large and well-made Blacksmith Drill. The gearing is designed for easy and quick running, being compounded for increasing power.

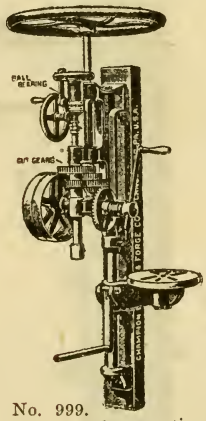
Drills to center to 18-inch circle from 0 to 1½ inches.

Weight 200 pounds.

Net price each.....$15.50
Extra for power..... 2.00

CHAMPION IMPROVED CUT GEARED.

Shipped from Factory.



No. 999.

Quick or slow motion is given to spindle. Drills to center of 16-inch circle, holes from 0 to 1½ inch.

Weight 200 pounds.

Net price each $21.00
Extra for power..... 3.25

BLACKSMITHS' DRILLS. CHAMPION SINGLE GEARED DRILL.

No. 2½

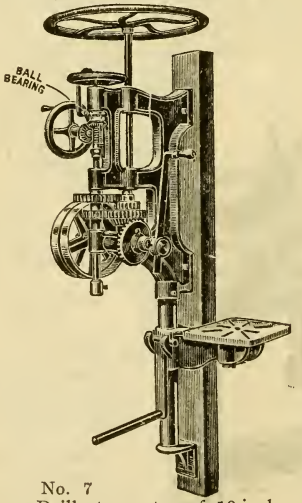
The Self-Feed Wheel is entirely free from the hand feed wheel. Drills to center of 14-inch circle, from ⅛ to 1 inch hole.

Weight 130 pounds.

Net price each.....$12.00
Extra for power..... 2.00

CHAMPION IMPROVED CUT GEARED.

Shipped from Factory.



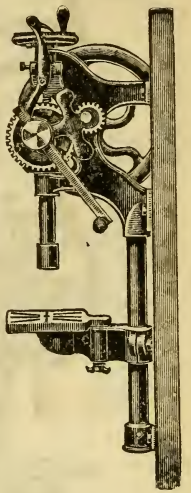
No. 7

Drills to center of 19-inch circle, from 0 to 1½ inch hole, takes ½-inch round shank drills.

Weight 300 pounds.

Net price each.....$25.00
With 10x2½ Pulleys.. 2.50

CHAMPION SELF FEED DRILL.



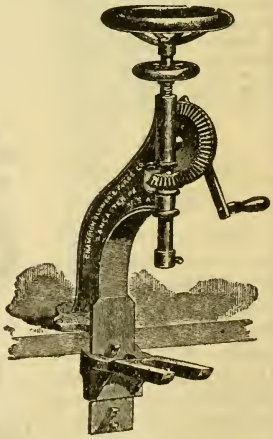
No. 93½

This drill in dimensions and general construction is same as No. 93, except the gearing is not protected with Double Journal Bearings, and for this reason is sold for less money.

Weight 115 pounds.

Net price each.....$7.50
Extra for power 2.00

THE CHAMPION NEW BENCH DRILL.



Has adjustable bed plate 26½ inches high.

Weight 34 pounds.

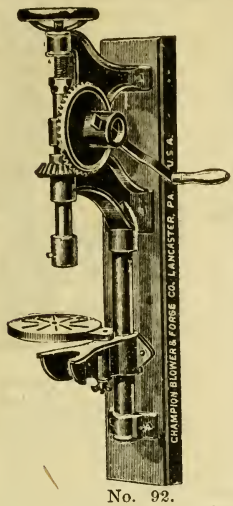
Drills up to ½ inch feed, has a run of 3½ inches.

Crank can be lengthened or shortened.

It takes ⅜ round or square shank drill bits.

Net price each.....$5.00

BLACKSMITHS' DRILLS.
THE CHAMPION HAND FEED POST DRILL.

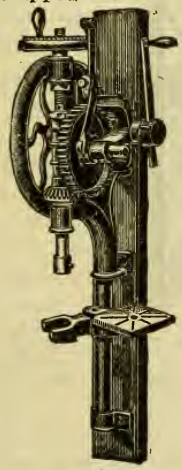


No. 92.

Will drill to center of a 14-inch circle, and hole 1-64 to ¾ inch. The shaft is made of 1 inch steel and has an up and down run of 3 inches. Spindle is bored for ½ inch straight shank drills. Weight 65 lbs.

Net price each $4.15

NEW IMPROVED CHAMPION DRILL, BALL BEARING,
Shipped from Factory.

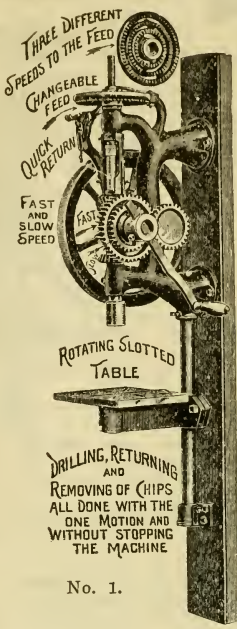


No. 4.

The No. 4 Drill is a very large, well made and practical tool, designed in every respect for large and heavy work. The main driving gear is 10 inches in diameter and double back geared, which can be changed from fast to slow speed. Drills to center of 18-inch circle. Drills from ⅛ to 1½ inch hole. Weight 200 lbs.

Net price each $13.50
Extra for power 2.00

WESTERN CHIEF.
Shipped from Factory.



No. 1.

Why it is the Best.

1st. It has three changes of speed to the feed—slow, medium and fast.

2d. It takes less time to change the feed than it takes to tell about it.

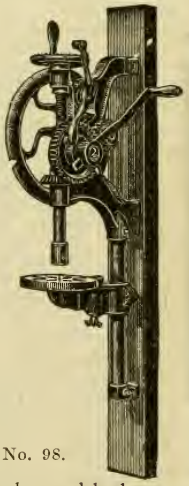
3d. Quick return the best yet; a movement of the finger does it.

4th. It has two changes of speed, fast and slow — one for light medium work and one for heavy work. The change is made in an instant, without changing the handle, and no backward movement.

Drills to center of 15 inch circle, from 0 to 1½ inch hole. Takes ½ inch round shank drills.

Net price each.....$11.50
Extra for power..... 2.00

THE CHAMPION SELF-FEED POST DRILL.

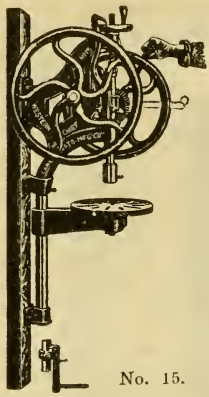


No. 98.

Has a single speed back gear, with our latest design self-feed. Bearings are ground to a working fit from the solid metal. Drills to center of a 14-inch circle and holes from 1-64 to 1 inch. Spindle bored to take in ½ inch straight shank drills. Weight 95 lbs.

Net price each.....$6.25
Extra for power 2.00

WESTERN CHIEF DRILLS.
Shipped from Factory.



No. 15.

Cut Gears. Back Geared. Self-feed. Changeable Speed. Drills to center of 19-in. circle. Bores 0 to 1½ inches. Up and down run of Spindle 4 inches. Up and down run of table, 11¾ inches. Greatest distance from table to Spindle, 13¼ inches.

Size of pulleys, 8 x 2½ inches. Should run 200 revolutions per minute. Spindle bored for ½ or 41-64 in. shank bits. ALWAYS STATE SIZE WHEN ORDERING.

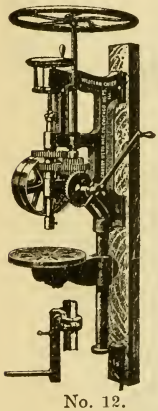
Weight, Hand Power, 180 lbs. Hand and Power, 190 lbs.

It has two speeds, fast and slow, and for heavy drilling the slow speed is instantly obtained by inserting the crank handle in rim of fly wheel.

The shaft on this drill (when ordered Hand Power) is left extended, to receive pulleys at any time thereafter.

Wheel Rims can be drilled by removing the table and using the forked support as a Wheel Holder. A special Wheel Holding Attachment, as illustrated, is furnished, when desired for $1.35 extra.

Net price each.
Hand Power (as illustrated).....$13.75
Hand and Pulley Power.....$15.50
Wheel Holding Attachment $1.35 extra.



No. 12.

Cut Gears Only, Used in this Drill.

DESCRIPTION.

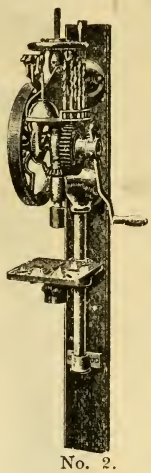
Automatic Self-feed. Fast and Slow speed, instant change. Drills to center of 10-inch circle. Bores 0 to 1½ inches. Up and down run of Spindle, 4 inches. Up and down run of Table, 15½ inches. Greatest distance from Table to Spindle, 16 inches. Size of Pulleys for power. 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64 inch shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, Hand power 215 lbs; Weight, Pulley power 235 lbs.

The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using forked support as a wheel holder. A Special Wheel Holder Attachment, as illustrated is furnished, when ordered, for $1.35 extra.

Net price each.
Without Pulleys, Hand Power Only....$18.75
With Hand Power and Pulley Power Attachments (as illustrated) 22.00

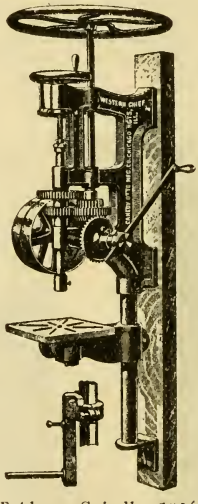


No. 2.

A first-class Drill at a very reasonable price. Self-feed, with three different speeds to feed; slow, medium and fast. Double Geared for slow or fast speed. Slotted, rotating, swinging Table. Drills to center of 15-inch circle. Bores 0 to 1½ inches. Up and down run of Spindle, 3¼ inches. Up and down run of Table, 13 inches. Greatest distance from Table to Spindle 13 inches. Size of pulleys for power, 8x2⅛ inches. Should run 200 revolutions per minute. Spindle Bored for ½ or 41-64 inch shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, 125 pounds. Wheel Rims can be drilled by removing table and using forked support as a wheel holder.

Net price each $11.50
Power attachment, Net extra..... 2.00



No. 7.

Cut Gears Only, Used in this Drill.

DESCRIPTION.

Automatic Self-feed. Fast and slow speed, instant change. Drills to center of 21-inch Circle. Bores 0 to 1½ inches. Up and Down run of Spindle, 5 inches. Up and Down run of Table, 16½ inches. Greatest distance from Table to Spindle, 19½ inches. Size of Pulleys for Power, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64 in. shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, Hand power.....275 pounds
Weight, Pulley power.....295 pounds

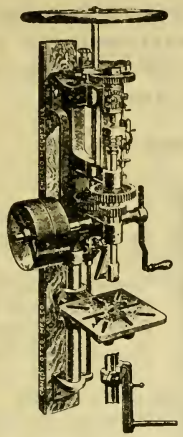
The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using the forked support as a wheel holder. A special Wheel Holder Attachment, as illustrated, is furnished, when ordered, for $1.35 extra.

Net price each. Hand Power only.....$23.00
With Pulley 25.50

WESTERN CHIEF DRILLS.

Shipped from Factory.



No. 14

Description

Straight and Bevel Gears are Cut. Fast and slow speed, instant change. Horizontal, Gear driven, positive self-feed, changeable instantly to fast, slow or medium, as desired. Raise and lower device to table.

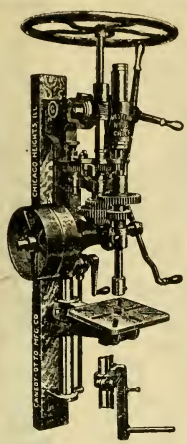
It has automatic quick return, allowing rapid withdrawal of the bit at will, without stopping or reversing machine. Or, it can be set to drill any depth desired and will automatically (whether running by power or hand) reverse itself, withdraw the bit and start drilling again and again indefinitely, all without stopping the motion of the machine.

Drills to center of 21-inch circle, bores, 0 to 1½ inches. Up and down run of spindle, 4 inches. Up and down run of table, 16½ inches. Greatest distance from table to spindle, 18 inches. Size of pulleys, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64-inch shank bits. Always state size when ordering.

Weight (hand power) 295 lbs. Weight (hand and power) 315 lbs.

Wheel rims can be drilled by removing table and using the forked support as a wheel holder. A special Wheel Holder Attachment, as illustrated, is furnished, when ordered, for $2.00 extra.

Net price each.
Hand power only....$26.00
Both hand power and pulley 28.00
Wheel holder attachment, $1.35 extra.



No. 16

Description

A Post Drill with the fine Features of Machine Shop Floor Drills.

Straight and bevel gears are cut. Fast and slow speed instant change. Hand lever feed, also horizontal gear-driven, positive self-feed, changed to fast, slow or medium speed instantly. These feeds work independent of each other and bit is lifted quickly.

Raise and lower device to table. Drills to center of 24-inch circle. Bores 0 to 1½ inches. Up and down run of spindle, 8½ inches. Up and down run of table, 15½ inches. Greatest distance from table to spindle, 18½ inches. Size of pulleys, 10¾ x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64-inch shank bits. Always state size when ordering.

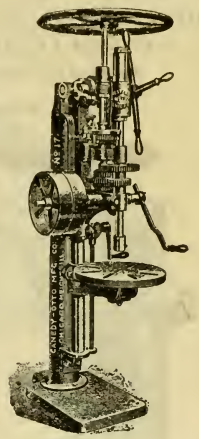
Weight (hand power) 340 lbs.

Weight (hand and power) 360 lbs.

Wheel rims can be drilled by removing table and using the forked support as a wheel holder.

When ordered hand power only, the shaft is left extended, so that pulleys may be placed at any time.

Net price each.
Hand power only.....$30.00
With pulley 32.00
Special wheel holder attachment, $2.00 extra.



No. 17

Description

A Finished Floor Drill, both Hand and Pulley Power.

Straight and bevel gears are cut. Fast and slow speed, instant change. Hand lever feed, also horizontal gear Driven, positive self-feed, changed to fast, slow or medium instantly. These feeds work independently of each other, and bit is lifted quickly.

Raise and lower device to table. Drills to center of 24-inch circle. Bores 0 to 1½ inches. Up and down run of spindle, 8½ inches. Up and down run of table, 15½ inches. Greatest distance from table to spindle, 18½ inches. Height of machine, 71 inches. Floor space, 15x 26 inches. Size of pulleys, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64-inch shank bits. Always state size when ordering.

When specially ordered we will bore Spindle to receive No. 3 Morse Taper.

Weight 560 lbs.

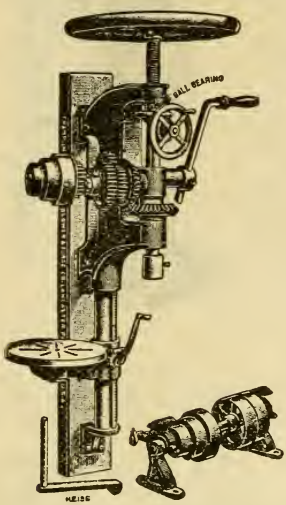
Wheel rims can be drilled by removing table and using forked support as a wheel holder. Special Wheel Holder Attachment can be furnished for $2.00 net.

Price, Hand and Pulley Power (as illustrated)

Net price each.....$40.00

THE CHAMPION No. 25 NEW BACK-GEARED AUTOMATIC SELF-FEEDING POST DRILL.

Shipped from Factory.



For Power or Hand, or Hand and Power Combined.

Made with Cut Gears and Ball Bearings.

No. 25 Champion Automatic Self-Feed Post Drill is a practical, up-to-date tool for all kinds of drilling. It is a single or double back-geared Drill which can be changed from one to the other in an instant. As the illustration will show, the gears turn or revolve in the same direction that the crank is turned, which adds to light running and momentum of the gears. We recommend this Drill for all kinds of work, drilling holes from 0 to 1½ inches. The independent countershaft, with three step-cone pulley to give the Drill different speeds, is of great advantage for a Power Drill. As a Hand Drill it carries our highest recommendation for ease of operation and the large range of work it will do. The only Drill far more superior with the gears running the same way is the No. 220 Champion "Patented" Combination Lever and Automatic Self-Feed. This drill is built with Double Back Gears which can be changed from double to single gear in an instant and with Ball-Bearings only, and is strictly high-grade in every respect. The Automatic Self-Feed is complete and practical; the Hand-Feed Wheel, or Quick-Return Wheel, meets many demands for quick work, for Machine Shops, Carriage Builders, Railroad Shops, Blacksmith Shops, etc. The Wheel Hanger is a valuable addition for Carriage Builders, avoiding scuffing of painted wheels, etc. Its spindle is bored like Never Slip or Kant Slip Chuck to take in 41-64 inch straight shank drill bit. If specially ordered will be bored for ½ inch straight shank drill bits. Drills from 0 to 1½ inch holes. It drills to the center of 22-inch circle; the feed screw has an up-and-down run of 6¼ inches.

Net price each.

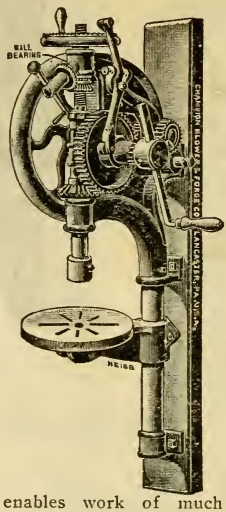
No. 25 Champion New Back-Geared and Cut-Geared Automatic Self-Feed and Ball Bearing Post Drill. Drills to the center of a 22-inch circle. With Cone Pulley and Countershaft. Complete for Power and Hand. Weight 440 lbs. $34.00

No. 25 New Back-Geared Drill with Tight and Loose Pulleys Complete for Power and Hand. Weight 350 lbs.... 27.00

No. 25 New Back-Geared Drill, for Hand only. Weight 325 lbs..... 25.00

THE No. 5 CHAMPION 20-inch SWING THREE-GEAR BALL-BEARING UP-RIGHT SELF-FEED BLACKSMITH POST DRILL.

Shipped from Factory.



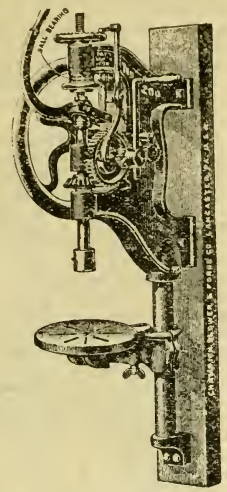
The No. 5 Champion 20-inch Swing Three-Geared Ball-Bearing Upright Self-Feed Blacksmith Post Drill, with Quick-Return and Hand-Feed Handle is an entirely new acquisition in Blacksmith Drills. It is a well-made and practical tool, designed for a great variety of work. Its 20-inch swing makes it a Drill in a class of its own as a first-class medium-priced Drill, as the large swing enables work of much larger range to be drilled. It is possible that a single job that could not be reached by a drill with a smaller swing would pay for this Drill or at least the difference in the cost of a smaller swing drill. This Drill is both light running and powerful. It is built for light as well as the heaviest work. It has full back gear, with our latest improved third gear principle, which gives the second speed the same crank motion as on the first speed. Our improved third gear being part of the handle hub, it is therefore disengaged when using the first speed, saving the continuous labor of pulling along an intermediate gear while using the first speed, and the first speed is used for at least 90 per cent. of the drilling in the average blacksmith shops. This Drill is supplied with our latest Improved Automatic Self-Feed. The Ball Bearing will save in power and friction when drilling from 20 to 50 per cent., the larger the hole the more saved. The Quick-Return Handle enables the mechanic to get the bit out of the work quicker and far more easily than by the use of the top or ratchet wheel. The Quick-Return Handle is also very useful to feed by hand for holes up to ½ inch, especially if the drill is run by power. It drills to the center of a 20-inch circle. Diameter of spindle 1¼ inches. It has an up-and-down run of 5 inches. Spindle is bored like Never Slip or Kant Slip Chuck to take in ½-inch straight shank drills. If specially ordered, bored to take in ⅝ or 41-64. It drills holes from 1-64 to 1½ inches.

No. 5 Champion 20-inch Swing Three Geared Ball-Bearing Upright Self-Feed Blacksmith Post Drill, with Quick-Return and Hand-Feed Handle. Weight, 240 lbs.....$17.00

Extra, for Power..... 2.50

THE No. 200 NEW CHAMPION "PATENTED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL.

Shipped from Factory.



No. 200 Champion "Patented" Combination Atuomatic Self-Feed and Lever-Feed Upright Post Drill is the smallest size Lever-Feed and Self-Feed Drill we manufacture. In its general construction however, it represents first-class workmanship and is sold at a price within reach of all. Therefore, the small blacksmith as well as the large manufacturer can enjoy the savings and great advantages of the Champion "Patented" Automatic Self-Feed and Lever-Feed. This drill is also very easy running as all the end friction is taken from the Drill Spindle by the use of Ball Bearings.

The great advantages obtained from the Champion "Patented" Automatic Self Feed and Lever-Feed are the time and labor saved by the instantaneous raising of the drill bit out of the hole just bored and again instantaneously replacing the drill bit back on the material ready to bore the next hole. These advantages are the same in both the Self-Feed and Lever-Feed and save in time and hard work, at least, 95 per cent. as there is no turning backwards of the Feed Screw Nut to get the Drill bit out of the work with either Feed.

As illustration shows, the Lever is adjustable, which gives the operator the advantage of more or less leverage to suit the work being done. The lever is especially profitable for boring small holes, countersinking and reaming. It also makes a perfect wood boring machine for a blacksmith shop.

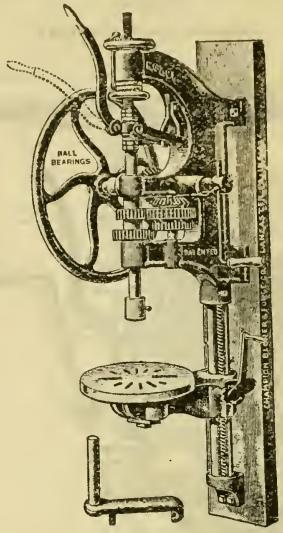
This Drill has Double Back Gears. Has two speeds. The crank on the second speed turns the same direction as the first speed and drills to the center of a 16-inch circle. The spindle has an up-and-down run of 4 inches. Has a spindle 1¼ inches in diameter. Is bored like Never Slip or Kant Slip Chuck to take in ½-inch straight drill bits. When specially ordered will be bored to take in ⅝-inch or 41-64 inch straight shank drill bits. Will drill holes up to 1¼ inches. Net price each

No. 200 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Upright Post Drill has Ball Bearings and Drills to the center of a 16-inch circle, Weight 160 lbs.....$16.00

Extra for Tight and Loose Pulleys for Power 2.50

Foot Power Feed furnished complete for this Drill, extra 3.00

THE NO. 201 CHAMPION "PATENTED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL.



Shipped from Factory.

Made with Cut Gears and Ball Bearings Only.

No. 201 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Cut Geared Upright Post Drill represents our latest improvements and the finest and highest grade workmanship that can be placed on a Drill. It is a strong and powerful built tool with machine Cut Double Sliding Back Gears for quick and slow speed, or for light and heavy work. The changing of the gears from slow speed to fast speed is accomplished in an instant. All end friction is taken from the Drill Spindle by the use of Ball Bearings and, in every respect, this Drill represents our best workmanship.

The workmanship on this Drill in its entire construction is our very best with cut gears and ball bearings. Drills to the center of a 21-inch circle. Spindle has an up and down run of 5½ inches. Has two speeds which are changed from one to the other by changing the gears. Has spindle 1¼ inches in diameter. Spindle bored like Never Slip or Kant Slip Chuck to take in ½-inch straight shank drill bits. If specially ordered will be bored to take in ⅝-inch or 41-64 inch straight shank drill bits. Drills holes from 0 to 1½ inches.

Net price each.

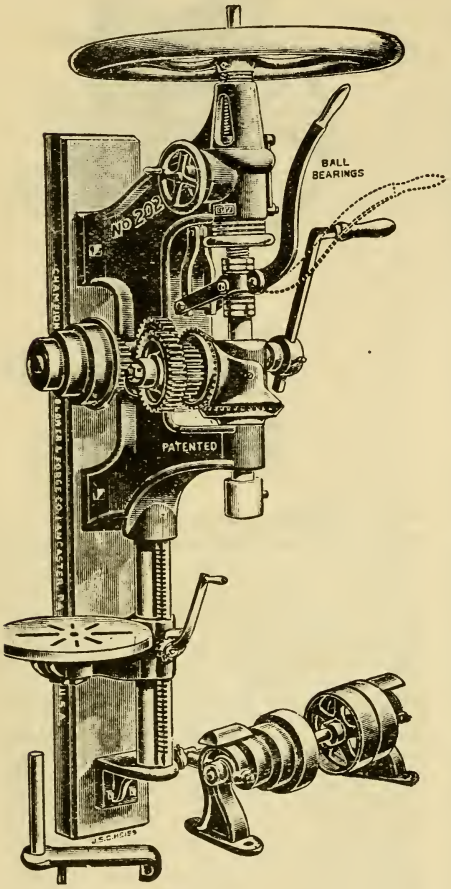
No. 201 New Combination Champion "Patented" Combination Automatic Self-Feed and Lever-Feed, Double Back Cut-Geared, Upright Post Drill, with Ball Bearings. Drills to center of a 21-inch Circle. Weight 325 lbs.....$25.00

Extra for Tight and Loose Pulleys for Power 2.50

Foot Power Feed furnished complete for this Drill, extra 3.00

202 CHAMPION "PATENTED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED DOUBLE BACK-GEARED UPRIGHT POST DRILL.

Shipped from Factory.



Made with Cut Gears and Ball Bearings only.

One-third time saved in drilling by the use of the different Feeds.

Bit is raised out of the work instantaneously by counter-balance.

Has rack for raising or lowering the table.

A great advantage in this Combination Feed Blacksmith Drill is that it is not only a Drill for drilling iron and steel, but with its Lever-Feed makes it the most perfect Wood-boring Machine ever manufactured.

The Ball Bearings save from 20 to 50 per cent. in power.

No. 202 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Upright Post Drill is the heaviest and most powerful Cut-Geared hand or hand and power Post Drill manufactured. As illustration shows, it has Double Back Gears which run in the same direction that the crank turns, giving the running of the Drill the benefit gained in the momentum of the gears. It will also be seen that the Bevel Gears are connected to the Drill spindle as close to the Drill-bit as possible and in connection with this all friction is taken from the Drill spindle by the use of Ball Bearings, making this extremely heavy drill a very light running drill suitable for the lighest as well as heaviest kind of work. The gears for heavy or light work, or from single to double gears, are changed in an instant by the simple sliding of the gears.

The Champion "Patented" Automatic Self-Feed and Lever-Feed on this Drill gives all the advantages of the instantaneous raising of the drill bit out of the hole bored and again instantaneously replacing the drill bit back on the material ready to drill the next hole, which saves at least 95 per cent. in time and hard work over and above any other principle of hand drilling. Do not forget there is no turning backwards of the feed screw nut when drilling with either the Self-Feed or Lever-Feed. The Lever is adjustable which gives the operator the benefit of different leverages for different kinds of work, and is very profitable for drilling small holes, reaming, counter-sinking, and makes the drill a perfect wood-boring machine. The Automatic Self-Feed and Lever-Feed are entirely independent of each other, the change from one to the other requiring but small fraction of a second.

This drill is supplied with our latest designed Automatic Self-Feed which gives a cutting clearance to the drill-bit, and makes drilling easier, quicker, and gives longer life to the drill-bit. The Foot-Power feed can be had if specially ordered, and is quite convenient for many kinds of work, especially drilling tires and duplicate work of the same order.

This drill as will be seen by illustration is shown with three-speed Cone Pulley and Countershaft, which gives every advantage that can be had in a power drill. It can also be had with Tight and Loose Pulleys if desired. This drill is supplied with rack for raising and lowering the table, which stops at any point, is quick in action, and never sticks. The rack never gets in the way for drilling as it turns with the table entirely out of the way. The wheel hanger for drilling tires is also furnished, which prevents the scuffing of painted wheels.

The spindle is like Never Slip or Kant Slip Chuck bored to take in 41-64 inch straight shank drill bits; if specially ordered will be bored to take in ½-inch shank drill bits. Drills to center of a 22-inch circle. Drills holes from 0 to 1½ inches. Feed screw has an up-and-down run of 6 inches.

Net price each.

No. 202 New Champion Combination Cut-Geared and Double Back Geared Automatic Self-Feed and Lever-Feed Upright Post Drill, has Cut Gears and Ball Bearings, Drills to the center of 22-inch Circle, with Cone Pulleys and Countershaft complete, for Power and Hand Combined, Weight 440 lbs..$45.00

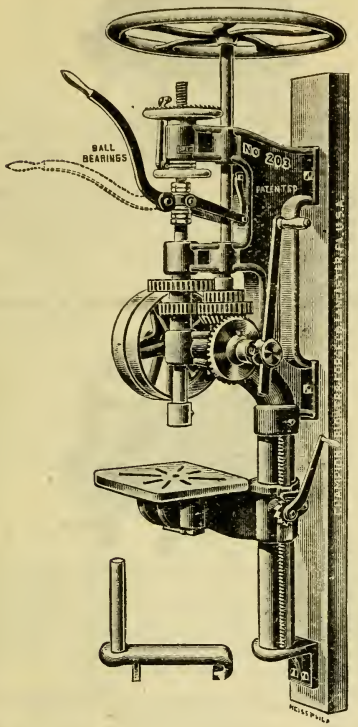
No. 202 Drill same as above, for Hand and Power combined, with Tight and Loose Pulleys for Power, Weight 340 lbs. 39.00

No. 202 Drill same as above, for Hand only. Weight, 325 lbs..... 36.00

Foot Power Feed furnished complete for this drill, Extra 3.00

No. 203 CHAMPION "PATENTED" COMBINATION CUT-GEARED AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL.

Shipped from Factory.



MADE WITH CUT-GEARS AND BALL BEARINGS ONLY.

No. 203 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Upright Post Drill has Cut Gears and represents every invention and effort that the human mind and mechanical ingenuity can place into a machine for drilling metal either by hand or by power.

REMEMBER that, with either the Self-Feed or Lever-Feed, there is no turning backwards of the Feed Screw Nut to get the bit out of the Hole. The bit always raises and lowers instantaneously and saves at least 95 per cent. in time over and above any other principle of doing the same work on hand Drills, which means also the saving of the hardest manual labor involved in drilling.

In connection with the above Automatic Self-Feed and Lever-Feed, we furnish a Foot Power Feed as shown on pages 124 and 125, which is a very practical Foot Power Feed, for many kinds of work, especially tire and similar drilling.

The Table of this Drill is raised and lowered by the use of a rack, which is quick in action, and never sticks or gets out of order. The Drill is furnished with a Wheel Hanger for drilling tire, which prevents the scraping of painted wheels. This Drill has two speeds which are changed from single to double gear for heavy to light work in an instant. The workmanship on this Drill in its entire construction is our very best.

It drills to center of a 21-inch circle. The spindle is bored like Neverslip or Kant Slip Chuck to take in 41-64 inch straight shank drill bits. If specially ordered, will be bored to take in ½-inch straight shank drill bits. The pulley for power is 10x2½ inches. Speed for ordinary work 180 revolutions per minute. Feed screw has an up and down run of 5½ inches. Will bore holes from 0 to 1½ inches.

Net price each.

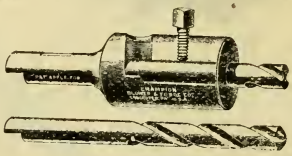
No. 203 New Champion "Patented" Automatic Self-Feed and Lever-Feed Upright Post Drill with Cut Gears and Ball Bearings, drills to the center of a 21-inch Circle, with Cone Pulley and Cone Countershaft, complete for Power and Hand Combined, Weight 435 lbs..$40.00

No. 203 New Champion "Patented" Automatic Self-Feed and Lever-Feed Upright Post Drill with Cut Gears and Ball Bearings, drills to the center of a 21-inch Circle, with Tight and Loose Pulleys for Power and Hand Combined, Weight 425 lbs..... 34.00

No. 203 New Champion "Patented" Automatic Self-Feed and Lever-Feed Upright Post Drill as above described, for hand only, Weight 400 lbs..... 31.00

Foot Power Feed Furnished Complete for this Drill, Extra 3.00

THE CHAMPION NEVER SLIP OR KANT SLIP DRILL BIT CHUCK.



The Champion Never Slip or Kant Slip Drill Bit Chuck accomplishes what users of blacksmith drills have wanted for many generations. It holds the drill bit tight and firm without the use of a set screw to keep it from turning. No more twisting off of set screws to try to keep the drill bit from turning in the drill chuck. In the Never Slip or Kant Slip Drill Chuck the set screw is only required to hold the drill bit from dropping or falling out of the chuck.

It will be seen that it is necessary to file an offset at the upper end of the drill bit shank as shown above, which requires about five minutes for each drill bit. The Never Slip or Kant Slip Drill Chuck represents in every detail the old style chuck for holding round shank drills; the Never Slip or Kant Slip invention is only an addition to the upper end of the chuck.

SPECIAL NOTICE.

All Spindles in Champion Drills from the largest to the smallest will, in the future, be bored like the Never Slip or Kant Slip Drill Bit Chuck addition WITHOUT EXTRA CHARGE.

Net price each.

No. 1 Champion Never Slip or Kant Slip Drill Chuck will fit all Champion Drills with ½-inch shank and take in ⅝ or 41-64 inch straight Shank Drill Bits..$1.50

No. 2 Champion Never Slip or Kant Slip Drill Chuck will fit all Champion Drills with ⅝ or 41-64 inch shank, and take in ½-inch straight Shank Drill Bits..... 1.50

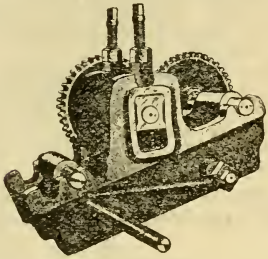
BLACKSMITHS' TIRE BENDERS.

No. 1. No. 2 and 2½.

Sizes. Net price each.
No. 1, will bend 3¼ inch tire or smaller..$4.25
No. 2, will bend 3¼ inch tire or smaller.. 5.00
No. 2½ will bend 6 inch tire or smaller.. 6.00

Note.—No. 1 is made with turned rollers and bearings; will bend to a circle 30 inches diameter or larger. No. 2 and 2½ are made with gear and pinion.

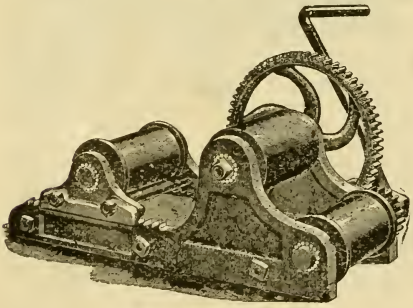
BLACKSMITHS' TIRE BENDERS.



No. 3. Extra Heavy.

This machine is double geared, has turned rollers and bearings, is very strong and durable, and will bend 5 inch Tire or smaller to a circle, 30 inches or larger. In bending very heavy tire two cranks may be used on opposite sides, thus giving double power.
Net price, with one crank.....$7.25

NEW IDEAL TIRE BENDER.

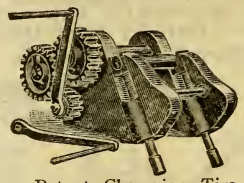


No. 2.

Net price each $8.00

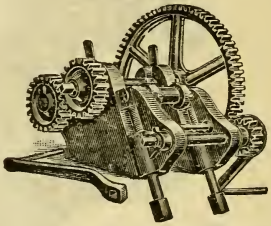
Note.—In offering the New Ideal Tire Bender we believe the merits of the machine will at once commend themselves to all. Tire bending on any of the old style benders has always been "back breaking" work. The Ideal Tire Bender with Roller Bearings will now make tire bending a pleasure. Over 50 per cent of power is saved. You cannot afford to continue using the old style Bender, time and strength are too valuable. It will bend tire up to 6 inches wide to a circle of 30 inches or larger.

THE NEW PATENT CHAMPION TIRE BENDER.



The New Patent Champion Tire Bender is constructed with all the new improvements. Will bend from a fifth wheel to any size up to 3x¾ inch. Its adjusting roll has an adjusting screw at each end, with a graduated indicator on each side of the bender, showing the exact size of the tire being bent, giving all the benefits of bending perfect tires from imperfect rolled iron. Weight 110 pounds.
Net price each $7.75

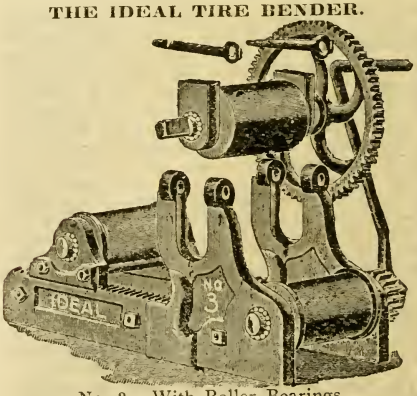
THE NEW PATENT EUREKA TIRE BENDER.



It is a strong and powerful tool, built with the latest improvements, adjusting screws at each end of the adjusting roll with a graduated indicator on each side of the bender showing the exact size of the tire being bent, giving the operator full control of the work. It will bend fifth wheels as well as large tire.

Net price each.
No. 1 will bend 4x1 inch tire, weight 180 pounds $12.25
No. 2 will bend 6x1½ inch tire, weight 300 pounds 16.75

THE IDEAL TIRE BENDER.



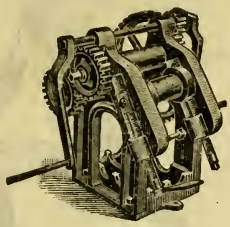
No. 3. With Roller Bearings.

Net price each 10.75

Made so that the center roll can be removed, which will enable the tire being removed after bending, or a tire can be put in the machine after it has been welded, and rolled to a true circle.

NEW PATENT GIANT TIRE BENDER.

Shipped from Factory.



This illustration represents our New Patent Giant Tire Bender with the latest improvements for adjusting the roll. A very important and valuable improvement for this bender, overcoming all former troubles of bending irregular iron. The adjusting roll is adjusted by a screw at each end of the roll, with a graduated indicator on each side of the bender showing the exact size of the tire being bent, giving the operator entire control of his work, doing away with the unpleasantness of having the tire coming out twisted and not meeting at the ends. The center roll pulls out the same as the Old Style Giant. All rolls are supplied with collars. It has two speeds, one fast for light tires, the second for heavy work.

Sizes. Net price each.

No. 3 bends 3x¾ inch tire, weight 175 pounds $12.50

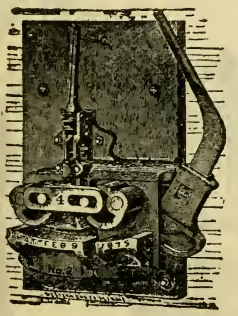
No. 2 bends 3x1 inch tire, weight 236 pounds 15.50

No. 1 bends 5x1 inch tire, weight 330 pounds 21.00

Extra heavy bends 6x1 inch tire, weight 375 pounds 23.00

STODDARD'S LIGHTNING TIRE UPSETTER.

The Old Reliable.



Net price each.

No. 1 is a 2 inch machine.....$5.75
Will upset a tire from ⅛ to ¾ inch thick and any work up to 2 inches.

No. 2 is a 4 inch machine..... 9.50
Will upset any tire to 4 inches wide.

No. 3 is a special 4 inch machine..... 11.75
Has two sets of loose jaws, can be adjusted for large and small circles and also for upsetting axles up to 1¾ inches thick.

MOLE'S TIRE SHRINKER.

The Simplest and Most Durable Tire Shrinker Made.

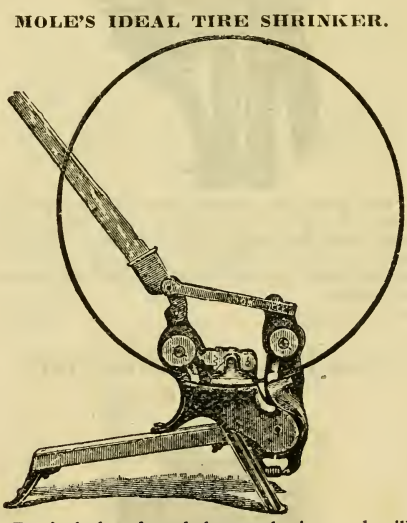
It is the only tire Shrinker that can be operated successfully by one man. The operation of bringing down the lever grasps the tire and does the work, raising the lever opens it. By this means it is not necessary to remove the tire until it is upset as much as required. It is especially made for heavy wagons and truck tires. It is very powerful, having a long lever.

Sizes. Net price each.

No. 2 Shrinker, bed 3 inches, weight 225 pounds .....$ 8.50

No. 3 Shrinker, bed 4 inches, weight 300 pounds 10.25

MOLE'S IDEAL TIRE SHRINKER.



Particularly adapted for truck tire, and will shrink tire with a 2-foot 10-inch circle and larger. The advantages of the Ideal Mole are:

The tire cannot shrink.

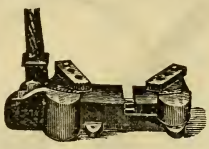
It will shrink light buggy tire, heavy wagon tire and truck tire. The cost is but a little more than an ordinary shrinker, but, being adapted for all sizes and thicknesses of tire, it is cheaper than any other. Every machine tested and warranted against breakage for one year:

Sizes. Net price each.

No. 2 Shrinker, bed 3 inches, weight 275 pounds $11.25

No. 4 Shrinker, bed 4 inches, weight 350 pounds 16.75

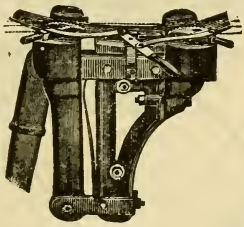
THE CHAMPION TIRE SHRINKER.



This machine saves all cutting and welding of tires. It is the easiest worked, simplest, most durable and economical Shrinker in the market. It meets universal approval and a long-felt want among blacksmiths, the price being within the reach of all consumers; is managed by one man with perfect ease and works equally well on the lightest steel tire and wagon tire 4 by 1 inch. Weight 140 pounds, floor space 18x10 inches, will shrink tire 4x1 inch, will shrink axles 1¼x1¼ inches

Net price each..... $8.50

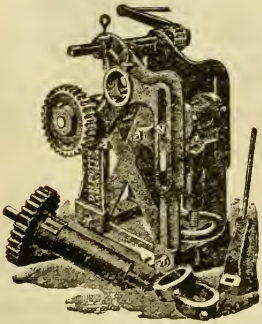
THE LANCASTER TIRE AND AXLE SHRINKER.



The Lancaster Tire and Axle Shrinker is heavy, strong and powerful, is built only in one size. Weight 200 pounds. Shrinks tires all sizes up to 4x1 inch, or 1½ inch axle. Is guaranteed to satisfy the most exact and severe tool critic.

Net price each $14.25

THE IMPROVED GIANT TIRE BENDER.



Sizes. Net price each.

Extra Heavy Size Bends 6x1 inch.....$23.00

No. 1 Size Bends 4x1 inch..... 20.50

WROUGHT IRON SHEAR.

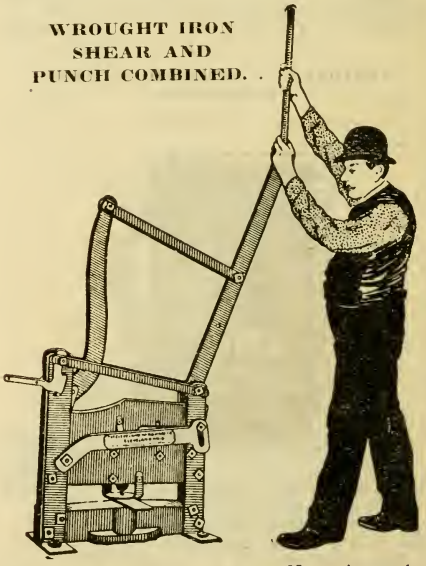
Shipped from Factory.

Net price each.

No. 195, weight 255 pounds. Will cut 4 inch by ¾ inch flat iron, and 1¼ inch round or square iron.....$29.00

No. 197, weight 255 pounds. Has 12 inch knives. Will cut 4 inch by ¾ inch flat iron, and 1¼ inch round or square iron; also will cut Plow Steel from 6 to 10 inches wide.....$33.00

WROUGHT IRON SHEAR AND PUNCH COMBINED.



Net price each.

No. 193, weight 450 pounds. Will cut 4 inch by ¾ inch flat iron, and 1¼ inch round or square iron. Will punch ½ inch holes through ½ inch iron.....$42.00

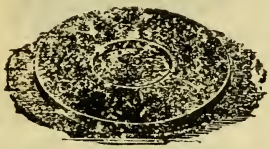
ADAM'S DIAMOND VISES.

Net price each.

Complete with Felloe Boring Attachment $4.00

Complete without Felloe Boring Attachment 2.75

LITTLE GIANT IRON PLATE FOR TIRE SETTING.

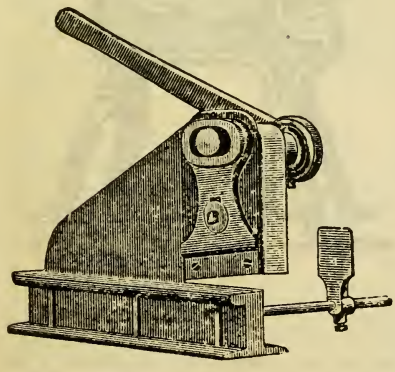


Size. Net price each.

5 feet diameter, 30 inch hole $17.00

The above cut shows one of our flat Iron Tire Plates for Tire Setting. These plates are cast in one piece, and are supported by ribs. A strong plate, yet light for handling.

HANDY SPLITTING SHEARS.

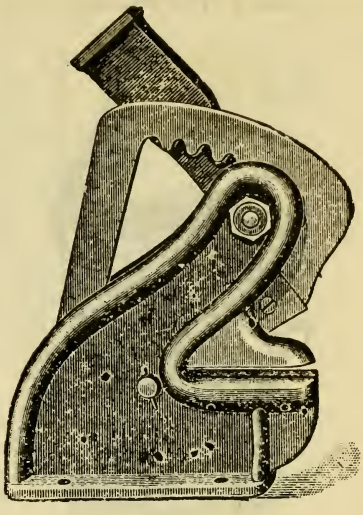


No. 1.

Net price each $13.50

Will shear ⅛ inch Sheet Metal and less any length or width. Weight 65 pounds. It is designed for tinners and all workers of light metal.

BADGER BAR AND ROUND IRON SHEARS.



No. A1.

Net price each.

No. A1 will shear ⅜x3 inch Flat, Weight 75 pounds $10.25

No. A1½ will shear ⅜x3 inch Flat, ¾ inch Round, Weight 90 pounds 12.50

No. A2 will shear ½x2 inch Flat, Weight 150 pounds 15.25

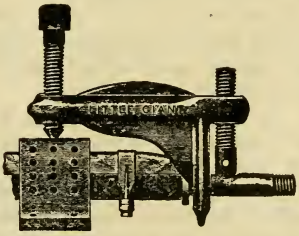
No. A2½ will shear ½x2 inch Flat, ⅞ inch Round, weight 165 pounds 20.00

BADGER-HAND PUNCH.

Net price each $11.50

Will punch ¼-inch hole in ¼-inch plate, will punch to the center of 5 inch. Weight, 70 pounds. Adapted to all light work. Three punches and dies and a lever bar go with punch.

THE LITTLE GIANT AXLE SETTER AND STRAIGHTENER.



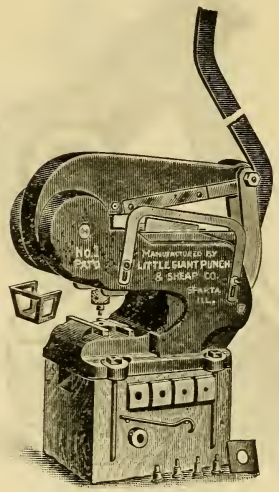
A labor and time saving machine that does its work complete. Axles bent can be accurately set without removing, making a perfect job. With the use of this machine it is not necessary to set axles on a new job until it is ready for the paint shop. All four axles can be straightened in less time than is usually required to remove one.

Sizes. Net price each.

For axles up to and including 1¾ in.... $5.00

LITTLE GIANT PUNCH AND SHEAR.

Shipped from Factory.



This is the Most Powerful Lever Punch and Shears Made.

No. 1—Will cut from ⅝ inch thick, 8 inches wide, and punch ⅝-hole in ½-inch iron. Weight, 500 pounds.

Net Cash price each.....$47.50

No. 2—Will cut iron ½ inch thick and 6 inches wide, and will punch ½-inch hole in ½-inch iron. Weight 325 pounds.

Net Cash price each.....$38.00

No. 3—Will cut iron ⅜ inch thick and 6 inches wide, and will punch ½-inch hole in ⅜-inch ron. Weight, 250 pounds.

Net Cash price each $28.50

600 lbs. on lever gives 25,000 lbs. pressure on punch. Always ready for work, and it does the business. Made in three sizes.

No. 1 cuts iron ⅝ inch thick up to 8 inch wide and 1 inch round; it will punch ⅝ hole in ½-inch iron. Weight, 500 lbs.

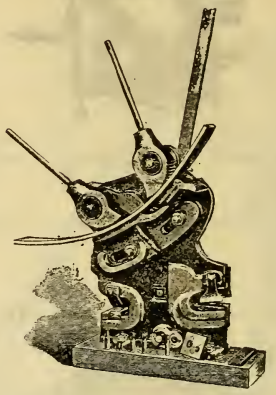
No. 2 cuts 6x½ and ⅞ round, punches ½-inch hole in ½-inch iron. Weight, 350 lbs.

No. 3 cuts iron 6x⅜, punches ⅞-inch hole in ⅜-inch iron. Weight, 250 lbs.

Occupies a floor space when it is up 10x24 inches. It is simple in construction, there being only two pieces of castings in it. You can duplicate any part of it in your own blacksmith shop. We furnish with each machine five sets of punches and dies, $\frac{5}{16}$, ⅜, $\frac{7}{16}$, ½ and ⅝.

BLACK GIANT SHEAR, UPSET AND PUNCH.

Shipped from Factory.



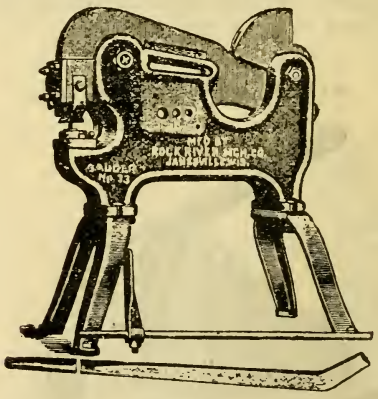
Net price each.....$47.00

"The Proof of the Pudding Is the Eating."

This old and trite saying is certainly applicable to our goods. Our New Improved Black Giant Shear, Upset and Punch combined, still continued to lead the band.

BADGER PUNCH AND SHEARS.

Shipped from Factory.



No. 33.

Net price each $29.00

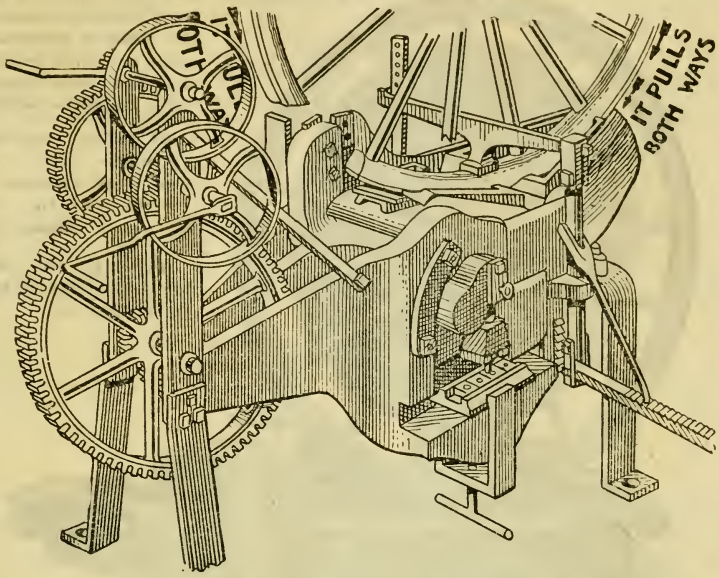
No. 33—Will shear ½ in. x 2½ in. or ¾ in. x 3 in. bars or ⅞ in. round iron. Will punch ⅜ hole in ⅜ in. plate, to center of 6 in. Weight, 310 lbs.

Net price each $50.00

No. 66—Will shear ½ in. x 4 in. or ⅝ in. x 3 in. flat bars or 1 in. round. Will punch ½ in. hole in ½ plate to center of 6 in. Weight, 510 lbs.

THE HOUSE COLD TIRE SETTER.

Shipped from Factory.



Our No. 2 and No. 3 Machine.

Is the greatest money maker that the blacksmith has ever had a chance to get. Why? Because it will set a tire in five minutes, and at an average of 50 cents each, will earn six dollars per hour, and sixty dollars in a day; and if you buy it and advertise it, it will pay for itself in three or four days the first dry spell that comes. Now these are facts and you can't dispute them because they are proven by testimonials, and the 1400 machines now in use in every state in the Union and in seven foreign countries. So it is up to you. Now, why won't you buy? Is it because you haven't the enterprise to make a little effort to get out of the old rut? Or, is it because you are making all the money you need? It is a joke for a man to run a shop without one. Anybody can buy one, and make it pay for itself. Write us.

	Net price each
No. 1 Machine sets tire up to ¾x2 inches	$145.00
No. 2 Machine with Hand Power sets tire up to ¾x3¼ inches	250.00
No. 2 Machine with Power Attachment sets tires up to ¾x3¼ inches	265.00
No. 3 Machine with both Hand and Power Attachment sets tires up to 1x4½ inches	365.00

WARRANTY.

We warrant each machine to be made of high grade cast steel, the No. 1 machine to set or reset all ordinary tires, cold, two inches wide by three-quarters of an inch thick, or all smaller sizes, on wheels from thirty to sixty inches in diameter. The No. 2 to set or reset all ordinary tires, cold, 3¼ inches by ¾ inch, or all smaller sizes on wheels 30 to 60 inches in diameter. The No. 3 machine to set or reset all ordinary tires, cold, 4½ inches wide by 1 inch thick, and all smaller sizes (tires wider than 2½ inches must not be cupped or less than ½ inch thick), and to be capable of doing the work well if our instructions are carried out. All grip-keys that break on account of defects within one year from shipment will be replaced without charge, F. O. B., St. Louis, Mo.

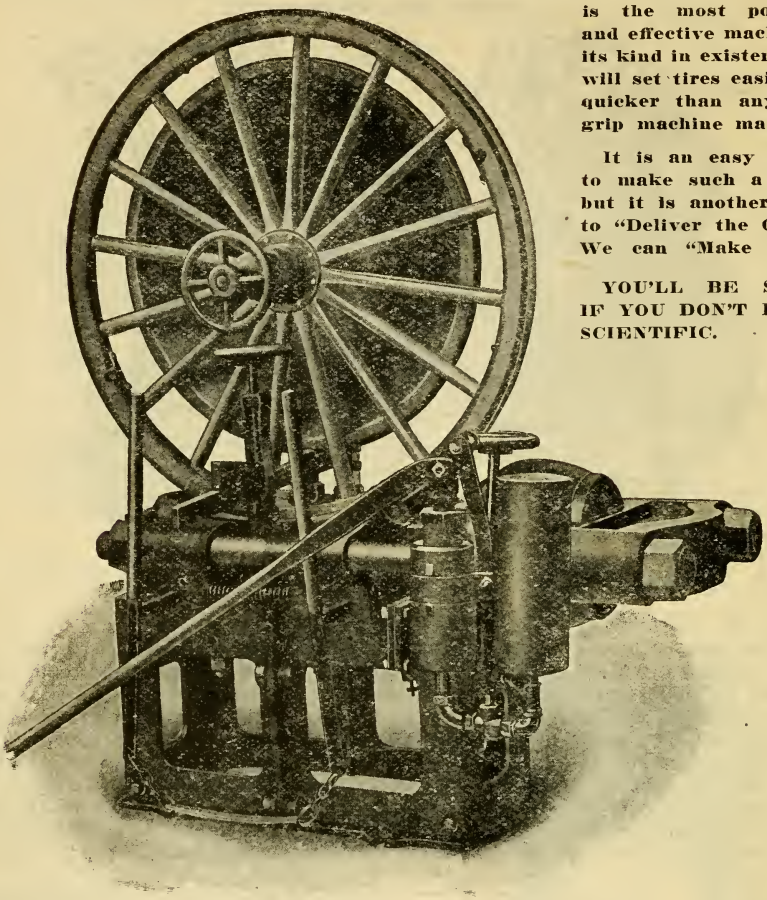
EXPLANATION.—The word "ordinary," used in the above warranty, is intended to cover all tires that are reasonably worth setting at all, and not tires that are rotten or so badly worn or cupped that they are of little or no service.

THE SCIENTIFIC HYDRAULIC COLD TIRE SETTER

is the most powerful and effective machine of its kind in existence and will set tires easier and quicker than any edge grip machine made.

It is an easy matter to make such a claim, but it is another thing to "Deliver the Goods." We can "Make Good."

YOU'LL BE SORRY IF YOU DON'T BUY A SCIENTIFIC.



THE SCIENTIFIC WITH STEEL CONE DISHER.

Shipped from Factory.

FACTS that Cannot be Denied by Other Manufacturers of Edge Grip Tire Setters.

FIRST—The Scientific is the easiest operated edge grip tire setter in the world.
SECOND—The Scientific will set tires in less time than any other.
THIRD—The Scientific has better tool steel grip jaws than any other.
FOURTH—The Scientific gripping jaws are better adjusted than any other.
FIFTH—The Scientific in intrinsic value is worth more money than any other.

Get a catalog that fully describes it.

By means of a new attachment the Scientific can be made to SET PERFECTLY wide thin tires, tires worn oval or to a thin edge, channel tires or thin buggy tires on nicely painted wheels, without marring the tires or felloes in the least. No other edge grip machine has ever done.

With this machine, the tire is drawn tightly around the wheel, and shortened from 1-16 to ½ inch at each gripping, by a few strokes of the hydraulic pump handle. TRY IT.

If you appreciate a machine that works easily, buy a Scientific. If you like hard work, then buy a cheap machine or set tires the old way.

See description and prices next page.

SIZE OF SCIENTIFIC TIRE SETTERS.

No. 2	Machine will set tires 2 x ½ or 1½x ⅝ and smaller.	Weight	1200
No. 2½	" " " " 2½x ⅝ or 2 x ¾ " " "		1300
No. 3	" " " " 3½x ⅝ or 3 x ¾ " " "		1500
No. 4	" " " " 4 x ¾ or 3 x1 " " "		2200
No. 5	" " " " 5 x1 or 4½x1⅛ " " "		4000
No. 6	" " " " 6 x1¼ or 5 x1½ " " "		6000

The sizes given above are for iron tires and if steel tires are to be set, a less size should be figured on, ranging from 1-5 to 1-3 less according to the hardness of the steel in the tire.

FLOOR SPACE required for hand machines is from 4 ftx3 ft to 6 ftx5 ft and with power attachment a slight additional space.

CAPACITY.

So much depends upon the quickness of the operator in setting tires with the Scientific that we dare not give the greatest capacity with the assurance that every one will equal it so we will state that with a No. 2½ machine tires can be set in from one to five minutes according to size of tire. There is not a blacksmith worthy the name but can set a wagon tire 1½x⅝ every five minutes by hand, which is at the rate of twelve per hour or one hundred and twenty for ten hours.

With power attachment the work can be greatly increased.

Large tires, of course, require proportionately longer time than small ones.

The same size of tire can be set by each size of machine, capable of setting it, in practically the same time.

WARRANTY.

Each machine is warranted to be well made, of good material; to set or reset tires cold and of the size stated above, to be capable of doing the work as well as is done by any other edge grip tire setter, to set tires *quicker* and *easier* than can be done with any other edge grip tire setter, and to be and to do as is represented by us in letters or printed matter, if our directions are followed.

Should any part of the machine prove defective or not strong enough to do a work required, it will be furnished by us free of charge.

This Warranty to be in force one year from date of installation of machine.

To test the merits of the machine we are willing that it should be used in competition with any other edge grip tire setter manufactured.

NOTE SPECIALLY.

There is one point we want to impress on the reader for his benefit as well as ours and that is he should not buy an edge grip machine without first seeing the Scientific. Words fail to convey to the mind of the casual reader the great difference in ease of operation, speed and general value of the Scientific as compared with other machines, hence we are anxious that prospective purchaser of tire setters should see this one in operation.

PRICE LIST OF SCIENTIFIC TIRE SETTERS.

		Weight	Cash Price	Time Price
No. 2	To set tires as stated in catalog	1250	$140	$150
No. 2½	" " " "	1300	160	170
No. 3	" " " "	1500	200	215
No. 4	" " " "	2200	260	275
No. 5	" " " "	4000	400	425
No. 6	" " " "	6000	550	600
Power Attachment,	No. 2 and 2½			30
" "	No. 3 and 4			40
" "	No. 5 and 6			50

TERMS.

Time Terms on all machines—One-fourth cash, balance in six equal notes one month apart.

Machines are delivered on cars or boat at Keokuk, Ia.

Machines will always be billed at time price and if paid for within ten days after receipt a discount will be allowed to make cash price.

A special catalog will be mailed upon application.

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

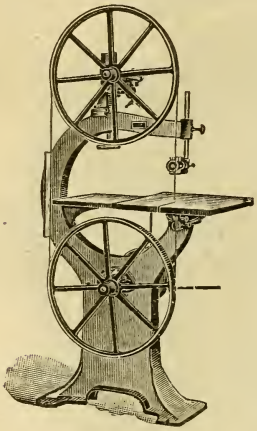


Fig. 820.

Sizes.	Net price each.
26-inch machine, with tight and loose pulleys	$56.00
Extra saw blade, 13 feet 9 inches x ⅜ inch, each	1.45

DESCRIPTION.

Band Wheels—They are 26 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths. The universal adjustment of this wheel will enable the user to lead the blade to any point on the face of the wheel.

Saw Blades—One blade, ⅜-inch wide by 13 feet 9 inches long, set and sharpened ready for use, is sent with this machine. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are included with saw.

Saw Guides—The one above the table is Wright's Patent Non-Friction Roller Guide, and serves as a good back and side support for the saw. As the back bearing revolves, the saws will not crystallize nor change in temper, and this point very materially lessens the breakage of saws. The new guide saves sixty per cent of wear and breakage of saws.

Tensions—There is a spring tension on this saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator.

Main Shaft—It is bored out and plugged so as to form an oil chamber for lubricating the loose pulley. Small holes are drilled into the shaft at point where pulley runs so as to lubricate the pulley. The oil is fed in through small hole in end of shaft.

Table—The table is made of iron and is planed level on top and beautifully finished on the edge. It can be tilted to any angle up to 45°, and a stop is provided for quickly returning it to position. It is held rigidly at every point by an eccentric lever, size, 20x24 inches.

Dimensions—Size of wheels, 26 inches; diameter, 1½-inch face; distance between saw and frame, 25 inches; height under saw guide, when raised, 8½ inches; table, iron, 20x24 inches; pulleys, 10x3 inches; width of belt, 3 inches; speed, 350 to 450 revolutions; length of saw blade, 13 feet 9 inches; floor space, 30x40 inches.

Shipping Weight—Belt power, 600 pounds; combination, 660 pounds.

SILVER'S COMBINED FOOT AND POWER SAW.

20-Inch Iron Band Wheels.

Shipped from Factory.

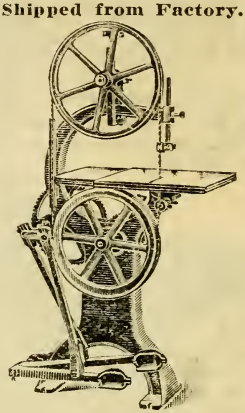


Fig. 721.

Sizes.	Net price each.
20-inch machine, with gearing and foot treadles, for one or two men, no pulleys	$42.00
Extra saw blades, 10 feet 1 inch x ¼ or ⅜ inch, each	1.10
Wright's Patent Non-Friction Roller Saw-Guide, extra	5.65

DESCRIPTION.

This machine is arranged for foot power, as illustrated. The lower band wheel is made heavy so that the running parts attain momentum when sawing. The saw is geared up from the treadles so as to be able to get the proper speed for sawing. In addition to the foot treadles, which show in the picture, there is a handle on the main drive gear so that a second person may assist with heavy work.

In dimensions and other respects this machine is like the 20-inch saw on the preceding page. This saw may also be fitted with pulleys for belt power. In driving by belt, disconnect the foot power attachments by removing one of the gear wheels.

Each saw is supplied with two saw blades and outfit for brazing broken saws.

Shipping weight, foot power, 390 pounds; combination, 415 pounds.

SIZES AND PRICES OF SAW BLADES.

Saw	Length	¼	⅜	½	⅝	¾	1 in.
20 in.	10 ft. 1 in.	$1.10	1.10	1.20	1.30	1.40	1.60
26 in.	13 ft. 9 in.	1.35	1.45	1.55	1.65	1.80	2.00
32 in.	16 ft. 4 in.	1.55	1.65	1.80	1.95	2.10	2.45
36 in.	18 ft. 6 in.	1.70	1.85	2.00	2.15	2.30	2.75

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

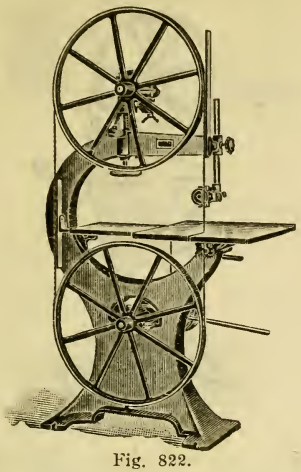


Fig. 822.

32-inch Iron Band Wheels.

Size.	Net price each.
32-inch machine, with tight and loose pulleys	$73.50
Extra saw blades, 16 feet 4 inches x ½ inch, each	1.80

DESCRIPTION.

Band Wheels—They are 32 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep the saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths.

Saw Blades—One blade, ½-inch wide by 16 feet 4 inches long, is sent with each saw. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are included with saw.

Tension—There is a spring tension on this saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator.

Main Shaft—It is bored out and plugged so as to form an oil chamber for lubricating the loose pulley. Small holes are drilled into the shaft at point where pulley runs so as to lubricate the pulley.

Table—The table is made of iron and is planed level on top and beautifully finished on the edge. It can be tilted to any angle up to 45 degrees, and a stop is provided for quickly returning it to position. It is held rigidly at every point by an eccentric lever, size 24x28 inches.

Dimensions—Size of wheels, 32 inches diameter, 1¾-inch face; distance between saw and frame, 31 inches; height under saw guide, when raised, 11 inches; table, iron, 24x28 inches; pulleys, 12x3½ inches; width of belt, 3½ inches; speed, 350 to 450 revolutions; length of saw blade, 16 feet 4 inches; floor space, 35x48 inches.

Shipping Weight—950 pounds.

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

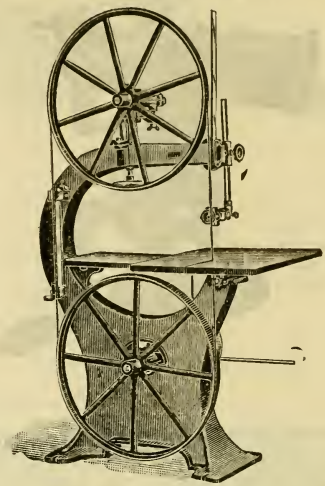


Fig. 824.

36-Inch Iron Band Wheels.

Size.	Net price each.
36-inch machine, with tight and loose pulleys	$91.00
Extra saw blades, 18 feet 6 inches x ½ inch, each	2.00
Extra saw blades, 18 feet 6 inches x ¾ inch, each	2.30

DESCRIPTION.

Band Wheels—They are 36 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths.

Saw Blades—One blade, ¾-inch wide by 18 feet 6 inches long, is sent with each saw. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are included with saw.

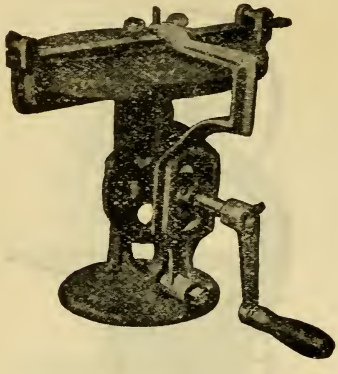
Saw Guide—The one above the table is Wright's Patent Non-Friction Roller Guide, and serves as a good back and side support for the saw. As the back bearing revolves, the saw will not crystallize nor change in temper, and this point very materially lessens the breakage of saws.

Tension—There is a spring tension on this saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator.

Dimensions—Size of wheels, 36 inches diameter, 2-inch face; distance between saw and frame, 35 inches; height under saw guide, when raised, 14 inches; table, iron, 28x32 inches; pulleys, 12x4 inches; width of belt, 4 inches; speed, 350 to 450 revolutions; length of saw blade, 18 feet 6 inches; floor space, 39x57 inches.

Shipping Weight—1,175 pounds.

AUTOMATIC CLIPPER KNIFE GRINDER.



Net price each.

Fitted for horse clipping knives.....$6.00
Fitted for sheep shearing knives..... 6.00
Fitted for both horse and sheep knives.. 6.50

Sharpens horse clipper or sheep shearing knives in a few seconds good as new. It is automatic. Weight boxed, 36 lbs.

CLIP THE HORSE.

One of the greatest improvements ever introduced into stable management, according to the opinions of leading veterinarians, is the custom of clipping horses in the spring, which has now become so common. A clipped horse will not only do a greater amount of work on the same amount of food that a horse with his natural winter coat will do, but he will also be fresh and full of vigor, while the horse with the heavy winter coat will be dull, out of condition and seldom or never dry or clean. Clipping removes the tendency to sweat, and there is no comparison as between a long, wet coat and a short, dry one. When the winter coat is warmed up and the horse is being worked regularly it is next to impossible to thoroughly dry the coat, and this causes the animal to lose flesh, in addition to making him a prey to a multitude of ills. Big companies, which requires hundreds of horses in carrying on their business, have experimented and have found that where their horses were clipped coughs and pneumonia have been practically eliminated. Clip your horses early in the spring if you want to keep them healthy and in good condition.—*The Horseman.*

See Horse Clippers, Pages 95 and 96, this catalogue.

SILVER'S NEW BAND SAW.

20-Inch Iron Band Wheels

Shipped from Factory.

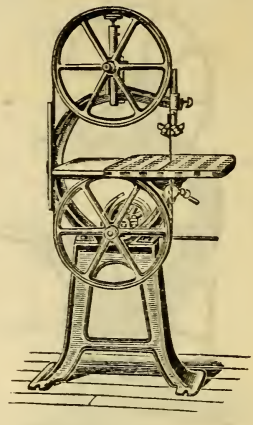


Fig. 720.

Size. Net price each.
20-inch machine, with tight and loose pulleys $35.00
Extra saw blades, 10 feet 1 inch x ¼ or ⅜ inch, each 1.10
Wright's patent non-friction roller saw guide, extra 5.70

DESCRIPTION.

Band Wheels—They are 20 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths. The universal adjustment of this wheel will enable the user to lead the blade to any point on the face of the wheel.

Saw Blades—Two saws are furnished with each 20-inch machine, ¼ and ⅜, No. 22 gauge, 10 feet 1 inch long, set and sharpened ready for use. Customers may have choice of any width biade up to 1 inch. Hardwood guides, brazing clamp and tongs are also included with each saw.

Pulleys—They are tight and loose, 7 inches diameter for 3-inch belt. A belt shifter and lever is provided as shown; no countershaft required. This machine is also made to drive by foot power. (See the following illustration.)

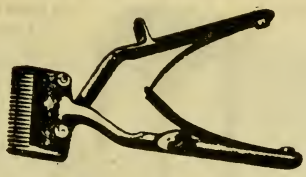
Table—Its size is 20x24 inches and is made of veneer glued together and re-inforced by an iron rib.

Dimensions—Size of wheels, 20 inches; distance between saw and frame, 19 inches; height under saw guide, when up, 7 inches; table, 20x24 inches; pulleys, 7x3 inches; size belt, 3 inches; length of blade, 10 feet 1 inch; speed, 350 to 450 revolutions per minute; floor space, 24x30 inches.

Speed—350 to 450 revolutions per minute.

Shipping Weight—300 pounds.

TOILET AND FETLOCK CLIPPERS.



Cut shows No. 10.

Net price each.

No. 10. Fetlock (like cut) with interchangeable parts $1.25

No. 20. Fetlock, 3 coil music wire spring, interchangeable parts 1.50

No. 40. Fetlock, 12 coil music wire spring with cap screw to regulate tension of spring, interchangeable parts..... 2.25

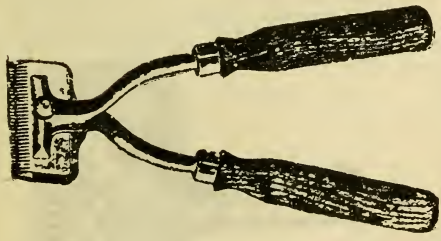
No. 2. Toilet, 3 coil music wire spring, interchangeable parts 1.25

No. 3. Toilet, same as No. 2 except double tension 1.35

No. 5-1. Toilet, best of material, best made, best cutting 2.25

No. 5-0. Toilet, same as No. 5-1, except has fine teeth, cutting hair very short. 2.25

HORSE CLIPPERS.



Net price each.

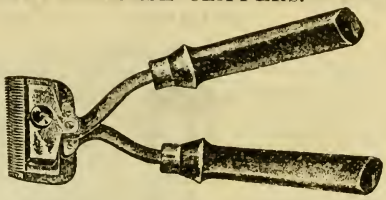
No. 20 Hotchkiss $0.75

No. 40 BB Hotchkiss 1.50

No. 50 Harvard 1.00

One of the most popular and one of the most salable Horse Clippers in the market. Is strongly constructed, perfectly fitted and adjusted.

HORSE CLIPPERS.



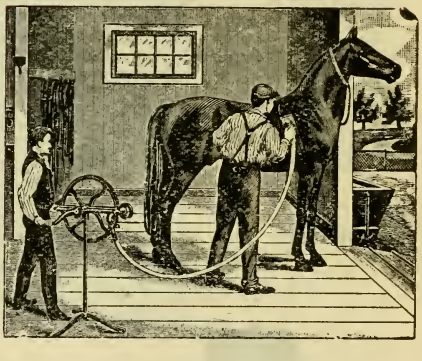
No. 400.

Net price each $2.00

Our Anti-Friction Ball Bearing Horse Clipper, recognized by the trade to be the best finished, and best working Clipper in the market. The mechanism and working qualities are perfect in every detail. Is full polished with natural finish Ebony handles.

1902 CHICAGO CLIPPER.

STEWART PATENT.



Net price each $10.75

Has positive power; rigid base; fine strong crank handle; 6½ foot flexible steel shaft. All gears are cut from solid metal and wearing parts all tool steel hardened, can be turned with either right or left hand. Complete with one set of Stewart one-nut tension knives in case. Weight, boxed, 56 lbs.

This machine is surprisingly strong and durable. The World's record for fast clipping was made with it at the St. Louis Exposition —time 13½ minutes. A boy can turn it all day without tiring. It satisfies completely the needs of the large stable.

CHICAGO VETERINARY POWER FLOAT.

Can be instantly attached to any of our clipping machines. Does better work than the hand float, keeps the horse's teeth in good condition.

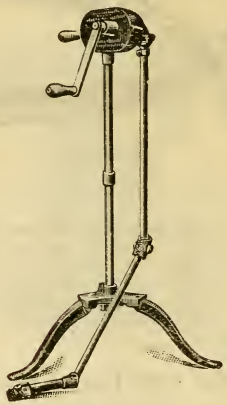
Price.

Each with one file $4.25

Extra files, each ..... .50

ENCLOSED GEAR SHEEP SHEARING MACHINE.

Shipped from factory.



Net price, complete with 4 knives.....$9.75

Extra Combs, 50c; Extra Cutter, 50c; Postage, 5c each.

All moving parts are enclosed in a dust proof box, where they run in oil. This practically does away with friction and wear. It turns easily and shears fast. The gears are cut from solid steel bar, and are hardened file hard by special hardening process. They could not be harder or tougher.

Weight, boxed, 40 lbs.

STEWART'S 1904 SHEEP SHEARING MACHINE.

Shipped from factory.

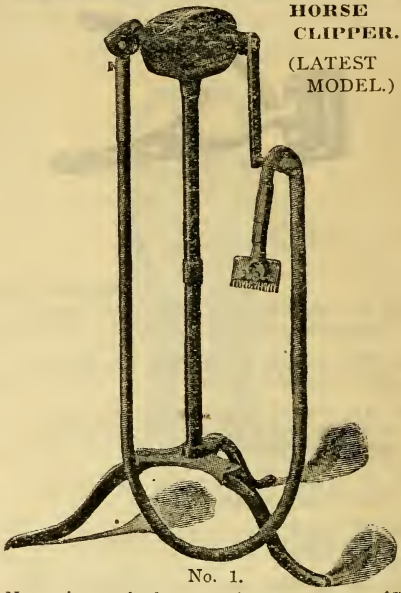
Net price, complete with 4 combs and 4 cutters $12.75

Extra Combs, 50c; Extra Cutter, 50c; Postage, 5c each.

Has revolutionized the sheep-shearing industry. It is scientifically simple, strong and durable, and adapted for flocks of from 5 sheep to 2,000. This machine saves wool, (about one pound to the head), saves time, saves labor, and saves the sheep. Weight, 52 lbs. Boxed, 70 lbs.

NEW STEWART ENCLOSED GEAR HORSE CLIPPER.

(LATEST MODEL.)

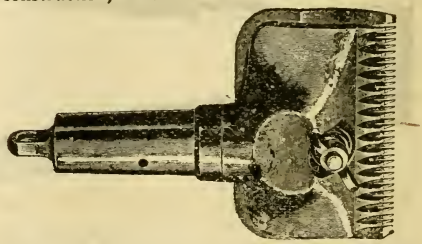


No. 1.

Net price each from stock.....$7.50

Has new style rigid base; tubular upright. All gears are cut from solid metal and are inclosed in a dust-proof metal box. They run constantly in a bath of oil, which reduces friction to a minimum. All wearing parts are hardened tool steel. New type light, easy running flexible shaft 6½ feet long. Complete with one set of Stewart one-nut tension knives. Weight, each, boxed, 36 lbs.

This new machine meets the demand for a very high grade clipper at a price any horse owner can afford. Every moving part is inclosed and safe from dust and dirt of all kinds. It runs easy and cuts with the greatest speed. Is very compact; can be carried around conveniently. By all odds a superior machine in construction, materials and action.

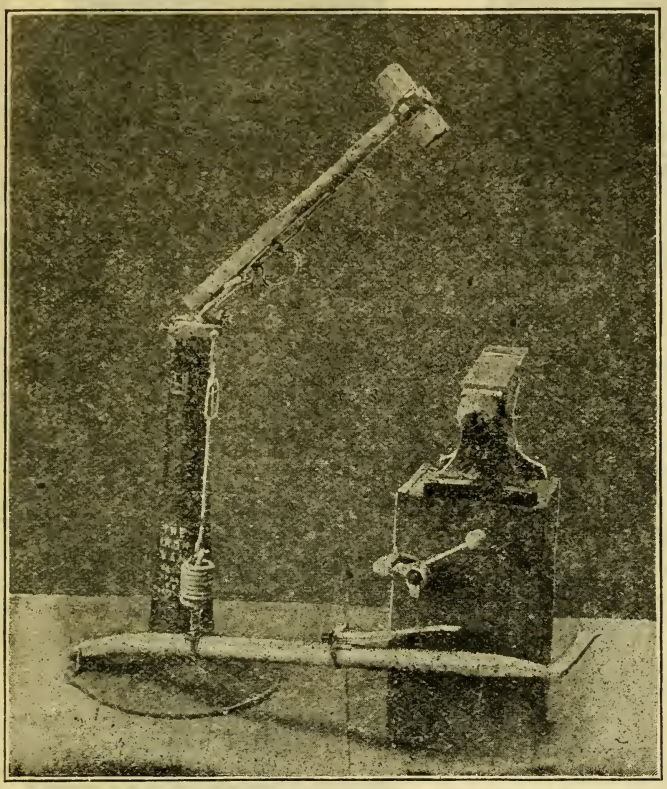


ALL OF THESE CLIPPING MACHINES ARE FITTED WITH THE ONE-NUT STEWART TENSION KNIFE.

	Net price each.
Knife and handle complete	$3.50
Extra knives, per set	2.50
Extra bottom plates	1.50
Extra top plates	1.00
Shaft and chain, per foot	.75
Shaft less chain, per foot	.50
Chain, per foot	.30
Handles only	1.00

THE IRON-MAN.

Shipped from factory.



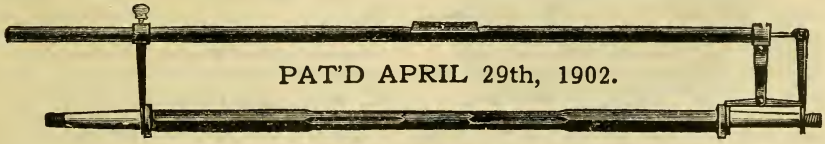
This is a Machine no blacksmith can afford to do without. It is always ready for business without pay or prompting. It is acknowledged by all smiths that have had a chance to test its merits to be the greatest time and labor-saving tool ever placed on shop floor.

The hammer is so nicely adjusted between coil springs and is so perfectly under the control of the smith that all kinds of welding can be done perfectly; enabling the smith to have both hands free to handle his work. After the weld is made, the flatter or swedge can be used the same as with a helper in making a nicely-finished job.

This machine is operated by foot power, and is so arranged that it can be adjusted to work at any point of the anvil from the horn to the heel; can also be as quickly adjusted to work rapid for welding light work, and strikes with an exactness that no helper can attain to from the simple fact that it strikes a mechanically true blow every time. It is under the perfect control of the operator at all times.

Net price each.....$25.00

THE REYNOLD'S AXLE GAUGE.



The simplest and best Axle Gauge on the market.

Adjusts itself to the spindle and registers the exact amount of set or gather on the indicator plate in inch measure. Can be adjusted to any length axle. Accurate, durable and easily handled. Can be used without removing axle from vehicle.

Price .....$3.50 each.

THE EASY SCREW PLATES.

Dimensions of the Easy.

Sizes. Net prize each.

No. 2 B, Plate Complete in Box. Has two stocks, one 15½ inches long for the first two sizes, one 23 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{3}{8}^{16}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$ $7.50

No. 5 B, Plate Complete in Box. Has two stocks, one 15½ inches long for the first four sizes, one 23 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{19}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.....$8.15

No. 5½ B, Plate Complete in Box. Has two stocks, one 15½ inches long for the first four sizes, one 23 inches long for the larges sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$..... 10.50

No. 9 B, Plate Complete in Box. Has two stocks, one 15½ inches long for the first four sizes, one 26 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{3}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8}.. 15.50

Note.—Every set supplied with our Patented Adjustable Electric Tap Wrench.

THE EASY FULL MOUNTED SCREW PLATES.

Sizes. Net price each.

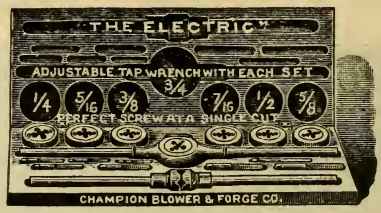
No. 55, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.....$ 9.00

No. 55½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$... 11.50

No. 57, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8}.. 15.25

No. 57½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$ $\frac{7}{8}^{9}$, 1^{8} 17.50

THE ELECTRIC SCREW PLATES.



Sizes. Net price each.

No. 5, Plate Complete in Box. Has two Stocks, one 18 inches long for the first four sizes, one 23 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.....$10.00

No. 5½, Plate Complete in Box. Has two stocks, one 18 inches long for the first four sizes and one 23 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$..... 12.50

No. 7, Plate Complete in Box. Has two stocks, one 18 inches long for the first four sizes, one 29 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{3}{4}^{9}$, 1^{8}..... 16.00

No. 9, Plate Complete in Box. Has two stocks, one 18 inches long for the first four sizes, one 29 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8}..... 18.50

Note.—Every Set supplied with our Patented Adjustable Tap Wrench.

THE ELECTRIC FULL MOUNTED SCREW PLATES.

Sizes. Net price each.

No. 105, Plates Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.....$11.25

No. 105½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.... 13.50

No. 107, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8}.. 18.75

No. 107½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8} 20.00

LITTLE GIANT SCREW PLATES.

Each Assortment in a Neat Wood Case.

Sizes. Net price each.

No. 1 has stock 14½ in. long, cuts ¼, 5/16, ⅜, 7/16, ½.....$ 8.00

No. 5 has stock 23 in. long, cuts ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾..... 10.65

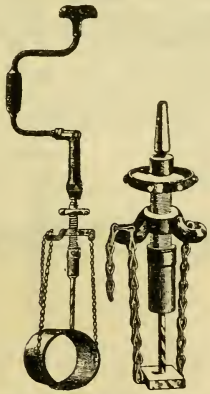
No. 5½ has stock 23 in. long, cuts ¼, 5/16, ⅜, 7/16, ½, 9/16, ⅝, ¾..... 12.35

No. 6 has stock 26 in. long, cuts ⅜, 7/16, ½, ⅝, ¾, ⅞, 1..... 14.70

No. 7 has stock 26 in. long, cuts ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞, 1..... 17.00

No. 9 has stock 14½ in. long for first four sizes, and 29 in. stock for the larger sizes, cuts ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞, 1..... 18.30

LUTHER'S "IDEAL" DRILLING ATTACHMENT.



No Blacksmith, Carriagemaker, Boilermaker, Mechanic, Plumber, Repairer, Windmill and Pumpman or Worker in Iron and Steel can afford to be without this drill. Blacksmiths and Carriagemakers can do nearly all jobs of drilling without removing the work. Superior to the breast drill as no pressure is required by the operator, the chain does that. Used on any bit-stock and puts holes in iron and brass easier than the common bit and brace into hard wood.

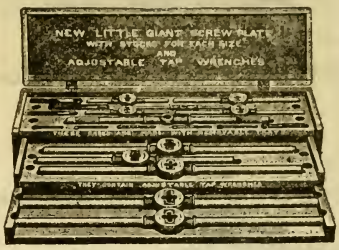
Luther's "Ideal" Force Drill works on ball bearings. Remember the chain does the pressing on, you don't.

Net price each.

Style A. Takes standard or half-inch Round Shank Drill $1.00

Style B. Takes Standard Square Shank, Bit Stock Drill. This is the style most commonly used ..... .90

LITTLE GIANT FULL STOCKED SCREW PLATES.



Each Assortment in a Neat Wood Case.

Sizes. Net price each.

No. 61 cuts ¼, 5/16, ⅜, 7/16, ½.....$ 8.00

No. 65 cuts ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾.... 12.00

No. 65½ cuts ¼, 5/16, ⅜, 7/16, ½, 9/16, ⅝, ¾ 13.70

No. 66 cuts ⅜, 7/16, ½, ⅝, ¾, ⅞, 1.... 16.00

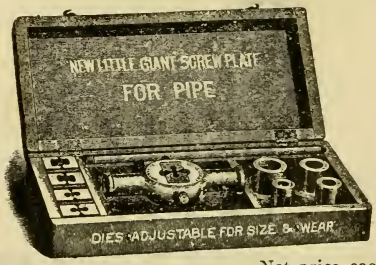
No. 67 cuts ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞, 1 ..... 19.63

Adjustable tap wrenches are included in these sets without extra charge.

NET PRICES OF PARTS FOR FULL STOCKED PATES.

Size.	Die.	Guide.	Stock.	Tap.
3/16	$0.85	$0.17	$0.43	$0.18
¼	.85	.17	.43	.22
5/16	.85	.17	.43	.25
⅜	1.06	.17	.43	.28
7/16	1.06	.17	.65	.30
½	1.27	.17	.65	.35
9/16	1.27	.17	.65	.40
⅝	1.49	.17	.65	.45
11/16	1.49	.17	.65	.53
¾	1.70	.17	.65	.60
13/16	1.70	.17	.85	.70
⅞	2.34	.17	.85	.80
15/16	2.34	.17	.85	.90
1	2.34	.17	.85	1.00

LITTLE GIANT PIPE SCREW PLATES.



Sizes. Net price each.

No. 1 Plate, Cutting ¼, ⅜, ½, ¾, 1 in..$5.40

No. 2 Plate, Cutting 1¼, 1½, 2 in..... 9.00

Note.—The guides are interchangeable throughout the set for convenience in cutting nipples. Sure to cut the thread straight. The dies can be resharpened. Dies are adjustable to overcome variation in fittings on pipe. Dies and guides can be changed quickly. It is light, yet strong and durable. Dies are held by bevel. No screws to break or get out of order.

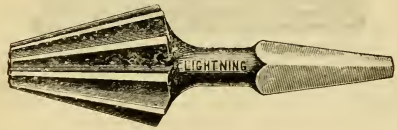
KNURLED CUP POINT NAIL SETS.

Assorted Points, net price each.....8c

KNURLED CENTER PUNCHES.

3/8 inch diam. at knurling, net price each ..10c

LIGHTNING BURRING REAMER.



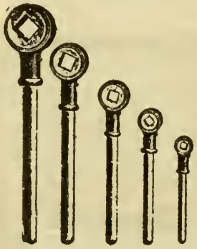
For Pipe, also for Countersinking. Of Fine Steel Carefully Ground to Cut Iron, Brass, Wood, etc.
Net price each 75c

LITTLE GIANT TAPS, DIES AND COLLETS.

For Bit Brace Use.

	Net prices complete.				
Sizes	3/16	1/4	5/16	3/8	7/16
No. of threads	24	20	18	16	14
Tap Die and Collet complete	$1.50	1.50	1.55	1.80	1.88
Taps only	.25	.25	.28	.30	.35
Dies only	.85	.85	.85	.85	.98

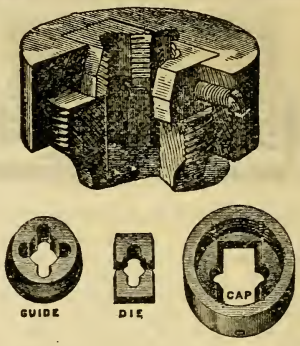
LITTLE GIANT RATCHET NUT WRENCHES.



			Each.
No. 1	3/16 and 1/8 inch.	7 inch.	$0.80
No. 2	5/16 and 3/8 inch.	8 inch.	1.00
No. 3	7/16 and 1/2 inch.	10 inch.	1.40
No. 4	5/8 and 3/4 inch.	13 inch.	2.20
No. 5	7/8 and 1 inch.	16 inch.	2.85

For the use of blacksmiths and carriage-makers. For the removal of nuts the above tool will be found a most convenient one. It is complete in itself. Is strong and thoroughly made. When ordering, give number of the wrench wanted.

LITTLE GIANT PLATE DIES.



Explanation of the Little Giant Die.

The Collet or holder is made of two pieces called a cap and a guide. The cap has a bevel slot into which the bevel die is fitted. The guide is screwed into the cap, which throws the die into the bevel of the collet and into line. To adjust simply turn the screws at the ends of dies in or out, as the adjustment desired requires.

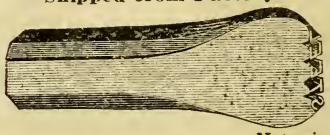
PRICES OF TAPS, DIES AND COLLETS FOR NEW LITTLE GIANT SCREW PLATES Nos. 1 to 9.

Collets, all sizes, $0.40.

Diam. In.	No. of Threads to inch.	Net price of Tap.	Net price of Die.
3/16	24	$0.18	$0.85
1/4	18, 20	.22	.85
5/16	16, 18	.25	.85
3/8	14, 16	.28	.98
7/16	14	.30	1.10
1/2	12, 13	.35	1.27
9/16	11, 12	.40	1.27
5/8	10, 11, 12	.45	1.40
11/16	11	.53	1.40
3/4	10	.60	1.60
13/16	10	.70	1.70
7/8	9	.80	2.34
15/16	9	.90	2.34
1	8	1.00	2.34

STEEL STAMPS, LETTERS AND FIGURES.

Shipped from Factory.



Sizes.	Net prices per letter or figure.
1/8 inch	$0.15
3/16 inch	.25
1/4 inch	.35

Stamps with eyes for handle add 35c to the stamp.

Note.—Stamps with three letters or less 5c per letter additional. Carefully made of best English steel and properly tempered.

CLARK'S DOUBLE CUT COUNTERSINKS.

Net price each $0.25

Make the smoothest work. Can be kept as sharp as a plane. Can be opened to sharpen.

METAL COUNTERSINKS.

Sizes. Net price each.

No. 50, Fits Tire Bolts.....$0.15

No. 80, Fits Wood Screws..... .15

Edges warranted not to turn or chip.

ROSE COUNTERSINKS.

For Metal or Wood.

Net price each $0.10

SNAIL COUNTERSINKS.

For Metal or Wood.

The best Countersinks made for all purposes.

Net price each $0.12

BIT BRACE REAMERS.

For Bit Brace Use.

Sizes, in...	1/4	5/16	3/8	7/16	1/2	9/16	5/8	15/16	3/4
Net price each	$0.16	.20	.24	.28	.32	.40	.48	.56	.64

For Use in Drilling Machines.

LITTLE GIANT COUNTERSINKS.

For use in Bit Brace.

Sizes. Net price each.

Countersinks, 5/8 inch diameter, with 1/2 inch Shanks $0.35

Countersinks, 5/8 inch diameter, for Bit Brace ..... .37

BLACKSMITHS' STOCK AND DIES.

No.	Size.	No. of Threads.	No. Taps	No. Dies	Net price
15	1 1/4 to 1/2	8, 10, 12	5	3	$5.60
23	1 to 3/8	9, 10, 14	3	2	2.75
34	3/4 to 5/16	10, 12, 16	3	3	2.45
34A	3/4 to 5/16	10, 12, 14	3	3	2.45
34B	3/4 to 7/16	12, 14, 16	3	3	2.45
35	3/4 to 3/8	10, 14	2	2	2.20
37	5/8 to 3/16	14, 18, 22	6	3	2.35
37A	5/8 to 3/16	12,14, 16	6	3	2.35
37B	5/8 to 3/16	14, 16, 18	6	3	2.35
41	1/2 to 1/8	16, 20, 26	6	3	1.75
41A	1/2 to 1/8	14, 16, 18	6	3	1.75
41B	1/2 to 1/8	16, 18, 20	6	3	1.75
53	5/16 to 1/16	16, 20, 24, 32	4	4	1.50
55	5/16 to 1/16	18, 24, 32	4	3	1.35

BLACKSMITHS' TAPER TAPS.

Sizes.	Number of threads.	Net price each.
1/4 inch	16, 18, 20, 22, 24	15c
5/16 inch	14, 16, 18, 20	15c
3/8 inch	12, 14, 16, 18	18c
7/16 inch	12, 14, 16, 18	20c
1/2 inch	10, 12, 14, 16	20c
9/16 inch	10, 12, 14, 16	25c
5/8 inch	10, 11, 12	25c
3/4 inch	8, 10, 12	33c
7/8 inch	8, 9, 10	45c
1 inch	8, 9, 10	63c

THE CHAMPION PATENT ELECTRIC ADJUSTABLE TAP WRENCH.

Sizes. Net price each

No. 2 for Taps 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4..$1.60

No. 3 for Taps 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1 ..... 2.25

LITTLE GIANT ADJUSTABLE TAP WRENCH.

Sizes. Net price each.

Size No. 6, Length 15 inches for Taps 1/4 to 3/4 inch $2.00

GERMAN GIMLET BITS.

Best Quality.

Sizes.	Net price per doz.	Sizes.	Net price per doz.
No. 2, 2-32	$0.60	No. 7, 7-32	$0.65
No. 3, 3-32	.60	No. 8, 8-32	.65
No. 4, 4-32	.60	No. 9, 9-32	.70
No. 5, 5-32	.60	No. 10, 10-32	.70
No. 6, 6-32	.65		

SYRACUSE PATENT WOOD BRACE DRILLS.

The Number indicates the sizes in 32ds.

Sizes.	Net price each.	Sizes.	Net price each.
No. 2	$0.08	No. 10	$0.18
No. 3	.08	No. 11	.20
No. 4	.08	No. 12	.20
No. 5	.10	No. 13	.22
No. 6	.11	No. 14	.23
No. 7	.13	No. 15	.25
No. 8	.15	No. 16	.25
No. 9	.17		

STRAIGHT SHANK DRILLS.

For Use in Chucks.

Diam. inch.	Lgth. inch.	Net price each	Diam. inch.	Lgth. inch.	Net price each
1/16	2½	$0.04	5/16	4½	$0.15
3/32	2¾	.04	11/32	4¾	.17
⅛	3	.05	3/8	5	.19
5/32	3¼	.06	13/32	5¼	.21
3/16	3½	.08	7/16	5½	.24
7/32	3¾	.09	15/32	5¾	.26
¼	4	.11	½	6	.28
9/32	4¼	.13			

BIT STOCK DRILLS FOR METAL OR WOOD.

Tempered to Drill all Kinds of Metal as well as Wood. Will Bore without Splitting It.

Diam. inch.	Lgth. inch.	Net price each	Diam. inch.	Lgth. inch.	Net price each
1/16	3 9/16	$0.05	5/16	6	$0.18
3/32	2¾	.06	11/32	4¾	.21
⅛	4⅛	.07	3/8	6	.24
5/32	4 9/16	.09	13/32	6¼	.25
3/16	5	.11	7/16	6½	.29
7/32	5¼	.12	15/32	6¾	.30
¼	5½	.14	½	7	.33
9/32	5¾	.16			

DRILLS FOR BLACKSMITHS' DRILL PRESSES.

With Shank 2¼ inches long and ½ inch in Diameter.

Diam. inch.	Lgth. inch.	Net price each.	Diam. inch.	Lgth. inch.	Net price each.
⅛	4⅞	$0.16	9/16	6	$0.33
5/32	4⅞	.17	19/32	6	.34
3/16	5⅝	.18	⅝	6	.38
7/32	5⅝	.20	21/32	6	.40
¼	6	.22	11/16	6	.41
9/32	6	.23	23/32	6	.43
5/16	6	.25	¾	6	.45
11/32	6	.26	25/32	6	.47
3/8	6	.27	13/16	6	.49
13/32	6	.28	27/32	6	.50
7/16	6	.29	⅞	6	.52
15/32	6	.30	29/32	6	.54
½	6	.31	31/32	6	.61
17/32	6	.32	1	6	.65

MACHINISTS' HAND TAPS.

Lightning Taper Tap

Lightning Plug Tap

Lightning Bottoming Tap

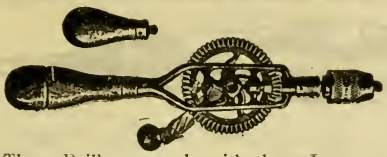
Diameter.	No threads to inch.	Net price Each.
¼ inch	18, 29, 24	$0.22
5/16 inch	16, 18	.25
⅜ inch	14, 16, 18	.28
7/16 inch	12, 14, 16	.30
½ inch	12, 13, 14	.35
9/16 inch	10, 11, 12	.40
⅝ inch	10, 11, 12	.45
¾ inch	10, 11, 12	.60
⅞ inch	9, 10, 12	.80
1 inch	8, 9	1.00

PIPE TAPS AND REAMERS.

Reamer. Tap.

Sizes.	Net price Each.	Sizes.	Net price Each.
⅛ inch	$0.23	¾ inch	$0.50
¼ inch	.25	1 inch	.63
⅜ inch	.30	1¼ inch	.75
½ inch	.38	1½ inch	.93

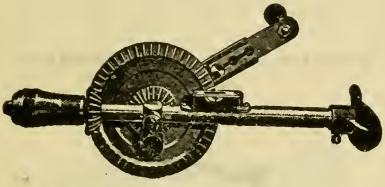
MILLER'S FALLS HAND DRILLS.



These Drills are made with three Jaws, resting in solid sockets. The chucks are nickeled and handles cocobola. They hold drills from 0 to $\frac{3}{16}$.

Sizes. Net price each.
No. 1, including 8 fluted points in hollow handle $1.35

BREAST DRILLS.

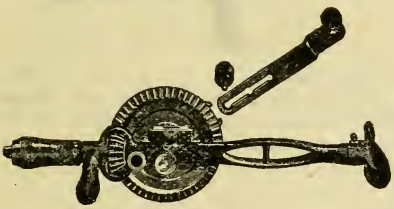


No. 10 Ball Bearing.

Sizes. Net price each.
No. 10 .....$2.85

Note.—Nickel plated stock and chuck. Cocobola handles. Extension crank. Alligator jaws, will hold both round and square shanks, and a patent level attachment to enable the operator to see when the tool is held thus.

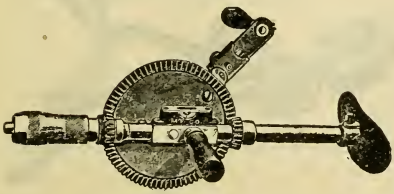
BREAST DRILLS.



No. 12.

Sizes. Net price each.
No. 12 .....$2.45

BREAST DRILLS.



No. 13 Ball Bearing.

Sizes. Net price each.
No. 13 .....$3.50

Note.—This Drill is double geared and has a 6-inch drive wheel, giving speed 4½ to 1. The gears are cut, the handle cocobola and the stock and chuck nickel plated. Note the level attachment to show when the tool is being held thus, also the extension crank.

BRACE NUT WRENCHES.

No. 2355.

	B	C	D	E	
Takes Nut for	¼	$\frac{5}{16}$	⅜	$\frac{7}{16}$	inch Bolt.
Opening	½	⅝	¾	$\frac{13}{16}$	inch
Net price each.....	2c	3c	3c	4c	

LITTLE GIANT DRILL HOLDERS.

For Holding Straight Shank Drills.
With Shank ½ inch Diameter.

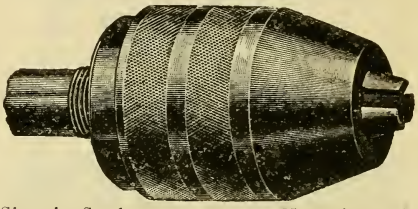
Net price each, without Drill.....75c

Note.—This will be found not only useful but a money-saving tool.

We carry in stock sizes for ⅛, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, ¼ and $\frac{9}{32}$ in. Drills.

Each tool carries only one size Drill. Give size when ordering.

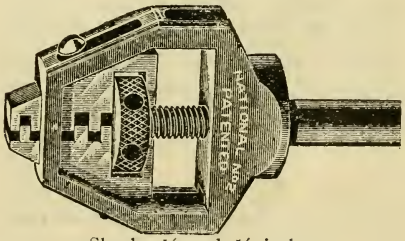
GOODELL'S DRILL CHUCKS.



Sizes in Stock. Net price each.
No. 15, will take up to ¼ inch Straight Shank Drills $1.20
No. 16, will take up to ½ inch Straight Shank Drills 2.25

Note.—A strong, durable and well made chuck at a moderate price. The Jaws are self-opening and will hold as firmly as the more expensive chucks.

NATIONAL BLACKSMITH DRILL CHUCKS.



Shanks ½ and ⅝ inch.

Sizes. Net price each.
No. 15, holding Drill 0 to ⅜ inch.....$3.25
No. 16, holding Drill 0 to ½ inch..... 3.85
No. 17, holding Drill 0 to ¾ inch..... 4.50

Made especially for Blacksmithing and Carriage Work.

A Chuck that is perfectly balanced.

The construction is so simple that any person can put it together in one minute.

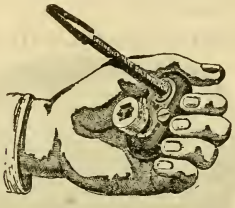
The only Chuck that is strong and powerful, equally adapted for either light, swift or heavy work.

GREEN RIVER TIRE BOLT HOLDER.

For clamping Bolts while the nuts are being turned on or off. Applied without a screw.

Net price each $0.65

GREEN RIVER PATENT RIM WRENCH.



For Nuts or Tire Bolts Inside the Felloe. For ¼ inch Size the Socket which Holds the Other Wrenches is Used.

Net price each, complete.....$1.30

This is a labor-saving tool for taking off and putting on nuts in an awkward place inside carriage felloes. It will be found to make rapid work of what is usually a tedious job with an S-wrench.

No workman with any regard for his time will fail to use this tool, which will soon earn its moderate cost in any shop, small or large. It is made light, handy and strong, and is adapted for use on nuts ⅛, $\frac{3}{16}$, ¼ inch.

LITTLE GIANT NUT WRENCHES.

For Square or Hexagon Nuts

For Bit Brace Use.

Sizes	¼	$\frac{5}{16}$	⅜	$\frac{7}{15}$	½ inch
Net Price Each	.10	.12	.15	.18	.20

THE COOLIDGE WRENCH.

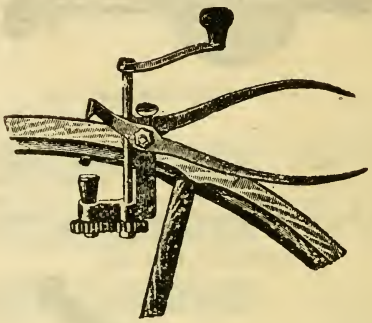
A Patent Adjustable Bit-Brace Wrench.

Net price each $0.75

Fits all sizes. Will not fail you. Always holds.

Indispensable to every Blacksmith. The necessity of every mechanic. Meets the need of every Carpenter. The user of Farming Tools and Wagons has long looked for it.

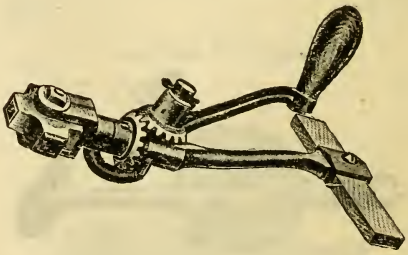
BYRNE'S TIRE BOLT WRENCH CLAMP.



Net price each.....$2.00

It should be in the shop of every Wagon maker because it reduces the work of tire setting to a minimum. Every machine guaranteed.

LANG'S TIRE BOLT WRENCHES.



Net price each.....$1.00

Positively the Best Nut Wrench Made for both Old and New Work. Will remove old nuts quicker than any other wrench and it is the only wrench that can be used on $\frac{3}{16}$, ¼, $\frac{5}{16}$ and ⅜ nuts.

Try one and you will use no other.

DOLE & DEMING'S PATENT SPOKE TENON MACHINE.

Shipped from Factory.

This machine has been long and favorably known to the carriage tool trade and its sale increases each year. The accuracy of its work adapts it to high grade wheels. It is fitted with the Star Hollow Auger and is arranged for hand or power, which adapts it for use in every shop, whether a large or small number of jobs are manufactured.

A fly wheel and handle has lately been substituted for hand use instead of crank, which is regarded a marked improvement. When power is applied the wheel should be removed.

Felloe boring attachments with round hole bit chuck furnished with all machines unless otherwise ordered. See Fig. 717 for felloe boring attachment.

Speed for power about 1,200 revolutions per minute.

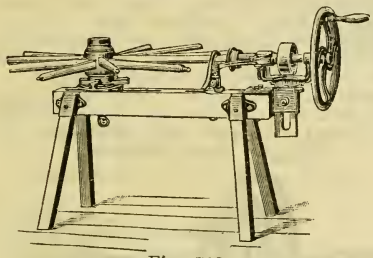


Fig. 718.

Sizes. Net price each.

No. 3, With Felloe Boring Attachment and No. 1 and No. 2 Augers, cutting tenons $\frac{7}{16}$ to 1¼ inches diameter, 4 inches long $34.20

No. 3½, With Felloe Boring Attachment and No. 1 and No. 3 Augers, cutting tenons $\frac{7}{16}$ to 1½ inches diameter, 4 inches long..... 38.00

No. 4, With Felloe Boring Attachment and No. 2 and No. 4 Augers, cutting tenons ⅝ to 2 inches diameter, 6 inches long 45.60

No. 4½, With Felloe Boring Attachment, and No. 1, No. 2 and No. 4 Augers, cutting tenons $\frac{7}{16}$ to 2 inches diameter, 6 inches long..... 51.68

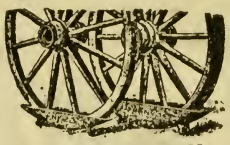
Nos. 3 and 3½ furnished without No. 1 Auger and Reducer at reduction of.. 6.08

Any of the above sizes furnished without Felloe Boring Attachment at reduction of 5.32

Nos. 3 and 3½ arranged to cut tenons 6 inches long, additional 3.75

Suitable countershaft, with tight and loose pulleys, for these machines..... 7.60

FELLOE OILERS.



Net price each.

No. 1, for wide tire wheels $0.75

No. 2, for narrow regular tires..... .55

A light cast iron tank for treating the wheels of wagons with linseed oil.

If properly used it will not only preserve your wheels indefinitely, but will save its cost in the setting the first season.

DOLE & DEMING'S PATENT SPOKE TENON MACHINE.

Shipped from Factory.

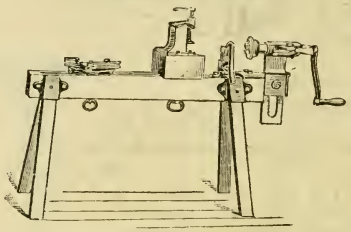


Fig. 716, No. 1.

This cut represents our No. 1 Spoke Tenon Machine, which is adapted to hand use. It is fitted with our No. 1 Star Hollow Auger, and will cut tenons any size from $\frac{7}{16}$ to 1 inch. The hub is held in a self-centering chuck, which can be revolved to present the spokes to the hollow auger. The spokes are held firmly on the rest, and in line with the auger. Thus all the tenons are cut with the shoulders uniform in width and in the same plane. With a slight transformation it can be changed into a boring machine, for boring the felloes for the spokes, giving that accuracy in the work that can be alone attained by machinery.

Our new illustration shows the felloe boring attachment on the machine as shipped. Bit chucks with ½ inch round hole always furnished with the felloe boring attachment unless otherwise ordered. When specially ordered we can furnish chuck with square hole, so the ordinary brace bits can be used in the machine. This size is now furnished complete with legs as shown, without additional cost.

Boring bits to use in connection with felloe boring attachment will be found on another page.

Sizes. Net price each.

No. 1, With Felloe Boring Attachment..$18.50

No. 1, Without Felloe Boring Attachment 15.00

No. 2, With Felloe Boring Attachment, cuts tenons ⅝ to 1¼ inches..... 24.00

No. 2, Without Felloe Boring Attachment, cuts tenons ⅝ to 1¼ inches.... 19.00

No. 2½, With Felloe Boring Attachment, cuts tenons ¾ to 1½ inches.... 26.00

No. 2½, Wihout Felloe Boring Attachment, cuts tenons ¾ to 1½ inches.... 21.00

Either size, with No. 1 Auger and Reducer, extra 5.76

SILVER'S NEW TAPER HUB-BORING MACHINE.

Shipped from Factory.

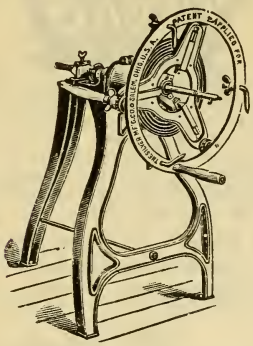


Fig. 706.

With Self-Centering Hub Chuck and Quick-Acting Open Feed Nut.

Centers the Hub Instantly and Accurately.

Sizes. Net price each.

No. 4, For light and medium work, up to 5½x10-inch hubs, mounted on legs as shown, weight 120 lbs.....$27.00

No. 5, With two mandrels, for light and heavy work, up to 8x13-inch hubs, mounted on legs as shown, weight 175 lbs. 35.00

Extra bits per set (four)..... 1.00

DESCRIPTION.

This machine is designed to bore holes in hubs of wheels in which to set the boxes, and it is operated by man power. It will bore straight or any desired taper and cut all necessary recesses, including that at the spokes; consequently the box is set without wedging. Fasten the wheel to the face plate by means of the screw hooks, with the point of the hub turned towards the machine. The cutting bit is in the point of the mandrel and the mandrel is held stationary. Set the mandrel to make a light cut and turn the wheel rapidly by means of the handle in the face plate. After making the cut it is only necessary to open the feed nut, and the mandrel is quickly withdrawn, ready for another cut. The taper is attained by throwing the back end of the mandrel to one side to a graduated scale. The wheel is trued at the rim by a simple adjustment of the face plate forward and backward.

The machine in the picture is mounted on a handsome stand, and can be located wherever wanted, away from the work bench, and the user is free to go about the wheel without being cramped. Some prefer to have the machine on the bench, so it is furnished also without stand at less price, as is displayed in the price list.

It is made in two sizes, Nos. 2 and 3. The smaller size, No. 2, is especially designed for light and medium work, up to hubs not exceeding 7¼x10 inches. No. 3 is provided with two mandrels, and is adapted to all classes of work up to hubs not exceeding 9½x13 inches.

SILVER'S POWER TAPER HUB-BORING MACHINE.

Shipped from Factory.

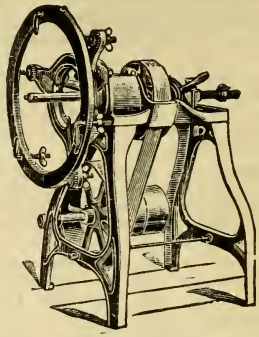


Fig. 708.

Adapted also for Hand Use.

With Self-Centering Hub Chuck and Quick-Acting Open Feed Nut.

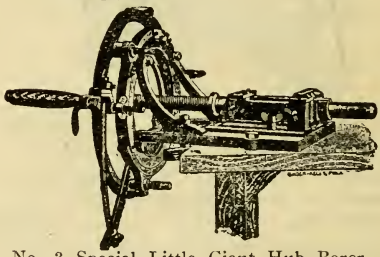
Centers the Hub Instantly and Accurately.

Net price each.

With two mandrels, for light and heavy work, up to 9½x13-inch hubs, weight 385 lbs. $58.00

LITTLE GIANT HUB BORER.

Shipped from Factory.



No. 3 Special Little Giant Hub Borer.

Sizes. Net price each.

No. 2, Special Little Giant Hub Borer, for light and medium work.....$22.50

No. 3, Special Little Giant Hub Borer, for light and heavy work..... 33.25

Note.—This is the only machine in the world that bores taper holes, in the exact center of the hub at the spokes, true with the rim, and the right size and shape to fit any box for any hub from a sulky to a wheel having a hub 9½x13 inches.

PEACE'S IMPROVED SPOKE TENONING MACHINE.

Every machine warranted to give perfect satisfaction. Made of best materials. Adapted to any size spoke or dish of wheel. Cuts tenons ¼ to 1¼ in. Perfectly true. Weighs 8 lbs.

A Good Machine for a Little Money.

Sizes in stock. Net price each.

With the felloe boring attachment.....$9.00

Without felloe boring attachment..... 8.50

WAGON BOX STRAPS.

Eight Pieces to a Set.

Sizes.	Net price per set.	Sizes.	Net price per set.
½x10 inch	$0.30	⅝x12 inch	$0.38
½x12 inch	.33	⅝x14 inch	.42
9/16x12 inch	.35	⅝x16 inch	.46
9/16x14 inch	.40	⅝x18 inch	.50

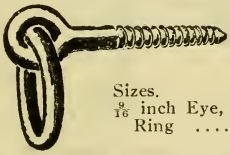
NECK YOKE CENTER IRONS.

Net price each.
Complete with Plate 7/16 inch Eyes, ⅜ inch Links, 3¼x9/16 inch Rings $0.13½
Extra Plates ..... .07

NECK YOKE FERRULES AND RINGS.

Sizes.	Net price each.
1½ inch inside large end	$0.05½
1⅝ inch inside large end	.07
1⅞ inch inside large end	.08½

NECK YOKE EYES AND RINGS.



Sizes.	Net price each.
9/16 inch Eye, 7/16 inch Ring	$0.06½

NECK YOKE EYES.

Sizes.	Net price each.
9/16 inch iron	$0.04½

STRAIGHT CENTER CLIPS.

Sizes.	Net price each.
7/16 in. End Clips, length 7½ inches	$0.02
½ in. End Clips, length 8½ inches	.03
½ in. Center Clips, length 9 inches	.03½
9/16 in. Center Clips, length 10 inches	.04
⅝ in. Center Clips, length 11 inches	.04½
¾ in. Center Clips, length 12 inches	.07

WELDED END CLIPS.

Sizes.	Net price each.
9/16 inch	$0.05
7/16 inch	.05
½ inch	.05

WELDED CENTER CLIPS.

Twisted.

Straight.

Sizes.	Net price each.	Sizes.	Net price each.
½ inch	$0.04½	½ inch	$0.03½
9/16 inch	.05	9/16 inch	.04
⅝ inch	.06	⅝ inch	.05

SINGLETREE CENTER CLIPS AND RINGS.

Sizes.	Net price each.
9/16 in. Clip, 7/16 in. Ring	$0.06
⅝ in. Clip, ½ in. Ring	.07
¾ in. Clip, ⅝ in. Ring	.11

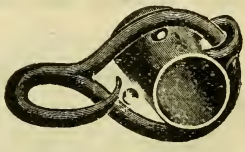
CENTER CLIPS AND HOOKS.

Sizes.	Net price each.
⅝ in. Clip, ½ in. Hooks	$0.08½
¾ in. Clip, ⅝ in. Hooks	.15

SINGLETREE END CLIPS AND HOOKS.

Sizes.	Net price each.
7/16 in. Clip, ⅜ in. Hook, in pairs	$0.04½

SINGLETREE HOOKS AND FERRULES.

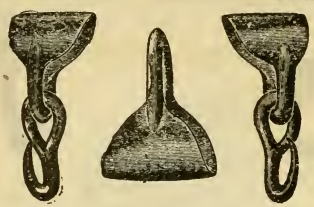


Sizes.	Net price each.
1¼ inch small end ⅜ inch hook	$0.05½
1⅜ inch small end ⅜ inch hook	.06
1½ inch small end 7/16 inch hook	.07
1⅝ inch small end 7/16 inch hook	.08

HEAVY FERRULES AND STEEL HOOKS.

Sizes.	Net price each.
1¼ inch, small end ⅜ inch	$0.06
1⅜ inch, small end ⅜ inch	.07
1½ inch, small end 7/16 inch	.08
1¾ inch, small end 7/16 inch	.10

SINGLETREE IRONS IN SETS.

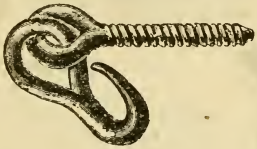


Net price per set.
One $\frac{9}{16}$ inch Welded Center Clip and 2 End Clips and Hooks $\frac{7}{16}$x$\frac{3}{8}$ inch.....15c

SINGLETREE HOOKS.

Size. Net price each.
$\frac{3}{8}$ inch 3c

SINGLETREE EYES AND HOOKS.

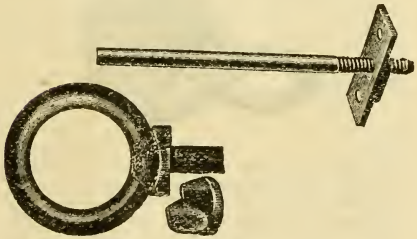


Size. Net price each.
$\frac{9}{16}$ inch Eye, $\frac{7}{16}$ inch Hook.....9c

WROUGHT IRON HAMMER STRAPS.

Size. Net price each.
Heavy pattern 8¾ inches from center to center of Hole 7c

PATENT WAGON BOX RODS.



Patent Malleable Collar.

Sizes. Net price each.
Narrow Track, 3 ft. 3 in.....7c
Wide Track, 3 ft. 7 in.....8c

COMMON WAGON BOX RODS.

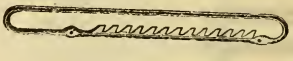
Sizes. Net price each.
Narrow Track, 3 ft. 3 in.....7c
Wide Track, 3 ft. 7 in.....8c

SINGLETREE END STRAPS.

Net price each.....5c

BRAKE RATCHETS.

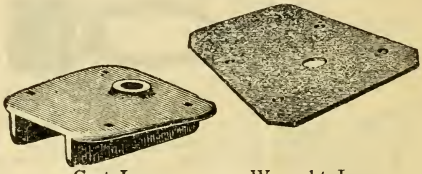
Plain.



With Guard.

Sizes. Net price each.
Brake Ratchets, Plain 12c
Brake Ratchets with Guard 29c

COUPLING OR REACH PLATES.



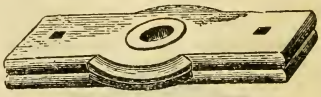
Cast Iron. Wrought Iron.

Sizes. Net price each.
No. 1, for 3½ inch Reach, Cast Iron.....27c
No. 2, for 4 inch Reach, Cast Iron.....35c
No. 3, for 4½ inch Reach, Cast Iron.....37c
No. 4, for 5 inch Reach, Cast Iron.....40c
Per pair.
Wrought Iron, 9x8x6½ inch, sold in pairs with one plate small holes round and one plate small holes square 45c

WROUGHT IRON BOX BRACES.

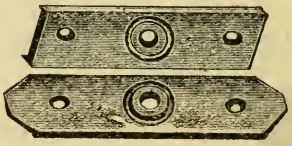
Sizes. Net price each.
$\frac{7}{16}$x15½ inches 5c
½x15½ inches 6c

CAST BOLSTER PLATES.



Sizes	2¾	3	3¼	3½ inch
Per set	35c	40c	45c	50c

WROUGHT IRON BOLSTER PLATES.



Sizes.	Net price per set.	Sizes.	Net price per set
2¾ inch	30c	3¼ inch	36c
3 inch	33c	3½ inch	38c

To Rivet.

WROUGHT WAGON BOX STAPLES.

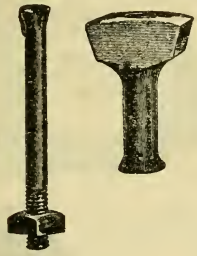
Sizes.	Net price each.
1½ inch wide, ⅝ inch deep	1c
1¾ inch wide, ¾ inch deep	1c
2 inch wide, ¾ inch deep	1c

WROUGHT WAGON BOX STAPLES.

To Clinch.

Sizes.	Net price each.
1½ inch wide	1c
1¾ inch wide	1c
2 inch wide	1c

PATENT CIRCLE POSTS.



To Clinch.

Sizes.	Net price each.
⅝ inch Circle	7c

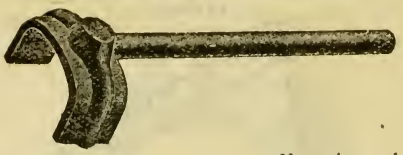
WAGON TONGUE CAPS.

	Net price each.
With Hold Backs	10c

POLE CAP WITH HOLD BACK AND WEAR IRON COMPLETE.

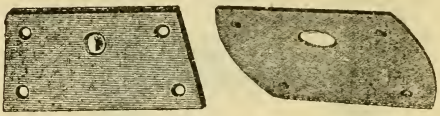
	Net price each.
Pole Cap, with Wear Iron complete	17c
Pole Caps only	10c
Holdback and Wear Iron together	7c

WAGON WRENCHES.



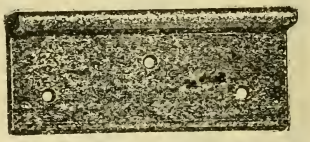
Sizes.	Net price each. ⅝	¾
1⅞ inch opening	8c	11c
2¼ inch opening	8c	11c
2½ inch opening	8c	11c
2¾ inch opening	8c	11c

STEEL TONGUE PLATES. STEEL DOUBLETREE PLATES.



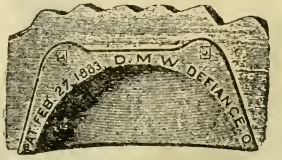
Sizes.	Net price each.
Steel Tongue Plates 7x6½x3 inches	5c
Steel Doubletree Plates 4⅛x3 inches	4c

STEEL WAGON RUB IRON.



Sizes.	Net price per pair.
5½x2½ inches	10c

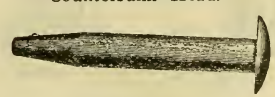
THE DICKMAN PATENT RUB IRON.



Net price per pair	40c

WAGON KING BOLTS.

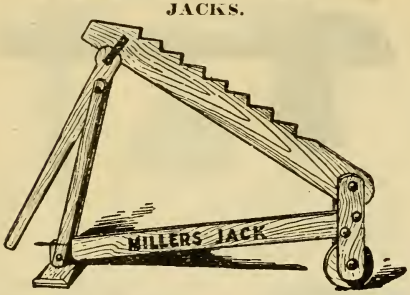
Countersunk Head.



Button Head.

Sizes.	Net price each.
1 inch Countersunk or Button Head	15c
1⅛ inch Countersunk or Button Head	20c
1¼ inch Countersunk or Button Head	25c

MILLER'S WAGON OR BUGGY JACKS.



Sizes in stock. Net price each.

No. 1, adapted for Buggies and light work. capacity 2,000 lbs. 60c
No. 2, for Heavy Wagon and Trucks, capacity from 3,000 to 5,000 lbs.....75c

This is an old and well known jack. Are always reliable and handy.

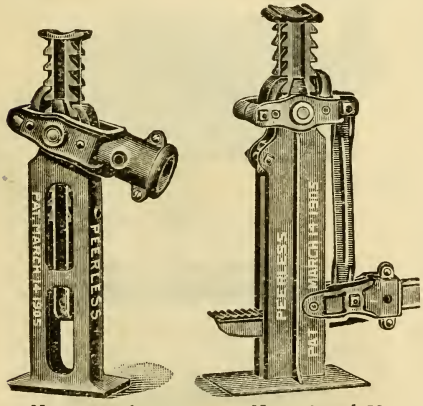
VICTOR WAGON OR BUGGY JACKS.

Cut shows position for holding 1,600 lbs. Weight 8 lbs.

The simplicity of its design and wonderful lifting capacity has made it the favorite with city and country trade. Only one size needed for any carriage or wagon.

Net price each 50c

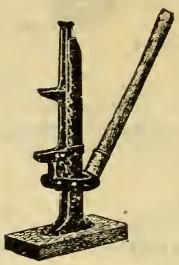
PEERLESS WAGON AND AUTOMOBILE JACKS.



Nos. 50 and 51. Nos. 52 and 53

	For Vehicles of	Height.	Rise.	Weight.	Price each.
No. 50	2 tons	10 in.	7 in.	4½ lb.	$1.75
No. 51	2 tons	12 in.	9 in.	5 lb.	1.75
No. 52	2 tons	11 in.	6 in.	5 lb.	2.10
No. 53	2 tons	13 in.	8 in.	6 lb.	2.75

THE OLIVER JACK.



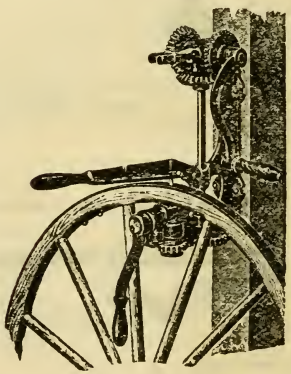
Sizes in stock. Net price each.

No. 1, will raise vehicles weighing 1 ton. .$0.60
No. 2, will raise vehicles weighing 2 tons. .95
No. 3, will raise vehicles weighing 3 tons. 1.40

Handled with either hand. Adjustable to any height by sliding the bracket up or down, catching the rivet in any notch desired. Will raise 2½ in. with one pull of the handle, and locks by passing the center. Lifting range, 24 inches.

Can also be used to set up machinery, pull posts, replace bottom fence rails, raising sills and light frame buildings.

REYNOLD'S TIRE BOLTING MACHINE.



This cut shows the wheel in position.

Net price each $6.50

A Combination Bolt Clipper, Bolt Wrench and Tire Bolt Holder.

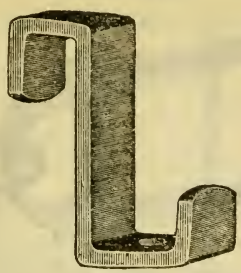
The only machine that will successfully remove burrs, run them on, or clip off the ends of tire bolts. Will fit any sized tap.

Either operation can be performed on any ordinary buggy wheel in less than two minutes, with perfect ease to the operator.

This machine is patented and the only machine of its kind on the market.

Every part interchangeable and carried in stock at all times and sold at a reasonable price.

WROUGHT SEAT HOOKS.

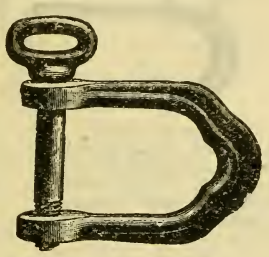


No. 3160.

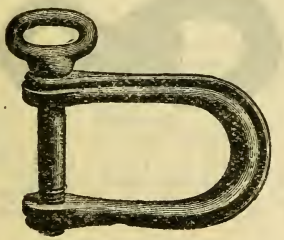
Size.	Net price each.
3½ and 4 inches long, either length	4½c

MALLEABLE IRON CLEVISES.

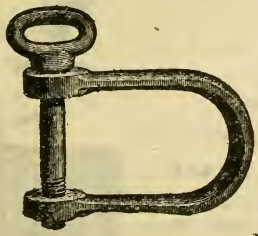
SCREW PIN DOUBLETREE CLEVIS.



No. 300, Net price each.....8c
2 in. wide inside. 4½ in. entire length.



No. 335, Net price each.....8c
2 in. wide inside. 4½ in. entire length.

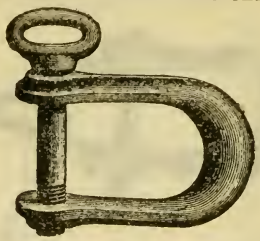


	Width inside.	Entire length	Net price each.
No. 395	2 inches	4½ inches	8c
No. 420	2 inches	6 inches	10c
No. 427	2¼ inches	6 inches	10c
No. 430	2½ inches	6 inches	11c

Order by Number.

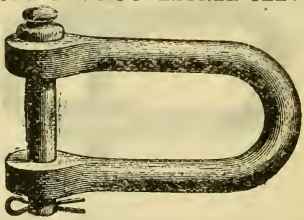
MALLEABLE IRON CLEVISES.

SCREW PIN DOUBLETREE CLEVIS.



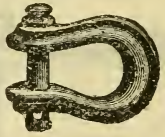
	Width inside.	Entire length.	Net price each
No. 480	2 inches	4½ inches	9c
No. 500	2 inches	5½ inches	10c

ROUND PIN DOUBLETREE CLEVIS.



No. 520, Net price each.....12c
2½ in. wide inside. 6 in. entire length.

PLOW CLEVIS.

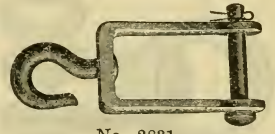


	Width inside.	Entire length.	Net price each.
No. 2805	⅞ in.	2⅞ in.	3½c
No. 2806, light pattern	¾ in.	3 in.	4c
No. 2810	1 in.	3½ in.	6c

PLOW CLEVIS.

No. 2820B, Net price each.....7c
¾ in. wide inside. 4½ in. entire length.

EVENER CLEVIS AND HOOK.



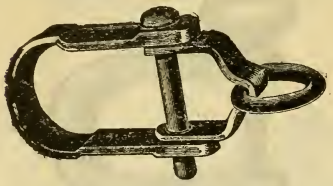
No. 2831.

SWIVEL HOOK.

2½ in. Beam, 4 in. Clear, 9¼ in. entire length.
Net price each.....25c

WROUGHT STEEL DOUBLETREE CLEVISES.

LOCK PIN CLEVISES.

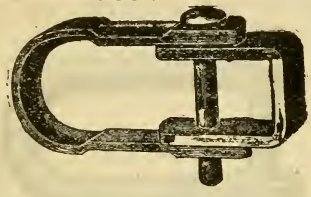


No. 3415A.

Sizes. Net price each.

No. 3415A Clevis, Clip and Stay.....10c
Chain Ring Complete, Opening in Clip for 1¾ in. Doubletree.

LOCK PIN.

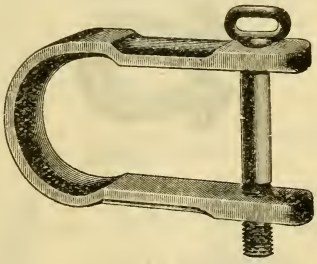


No. 3400A.

Size. Net price each.

No.3400A Clip for Square Back.....10c
Doubletree, Opening in Clip for 1¾ in. Doubletree.

SCREW PIN.



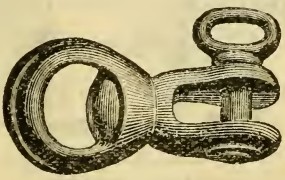
Nos. 3424A and 3425B.

Size. Net price each.

No. 3424A, Opening of Clevis 2 in., Length between inside and pin 3½ in., entire length of Clevis 4¾ in..... 8c
No. 3425B, Opening of Clevis 2 in., Length between inside and pin 4¾ in., entire length of Clevis 6¼ in.....10c

MALLEABLE IRON CLEVISES.

PLOW CLEVIS.

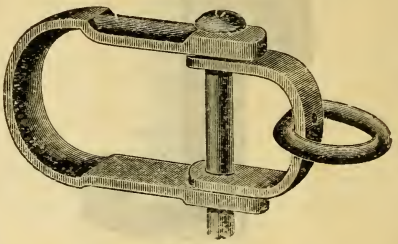


No. 2824.

Net price each.....15c
4⅝ in. extreme length. ¾ in. open.

WROUGHT STEEL DOUBLETREE CLEVISES.

LOCK PIN.

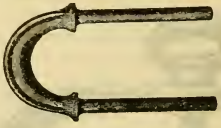


No. 3411A.

Size. Net price each.

No. 3411A, Clevis, Oval, Black Clip and Stay Chain Ring Complete, Opening in Clip for 1¾ in. Doubletree.....10c

DOUBLETREE STAPLES.



No. 215.

3¼ in. center to center.
5 in. length of shank.
½ in. diam. of shank.
7¼ in. entire length.

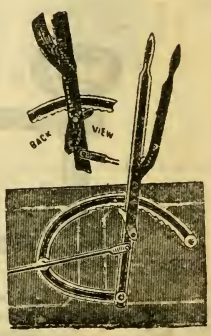
Net price each, threaded, with nuts.....15c

CHAIN SWIVELS.

No. 7715.

A	B	C	D	E	F	G	
3	3¼	4¼	4¾	5	5¾	7½	inches long.
⅜	7/16	½	⅝	¾	⅞	1	in. Eye.
5/16	5/16	⅜	7/16	9/16	9/16	¾	in. Wire.
3	4	8	10	11	15	28c	Price each.

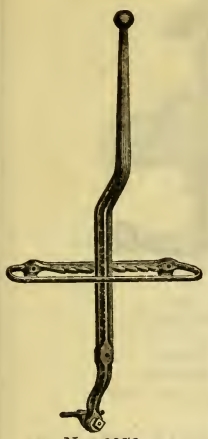
COLLINS WAGON BRAKE.



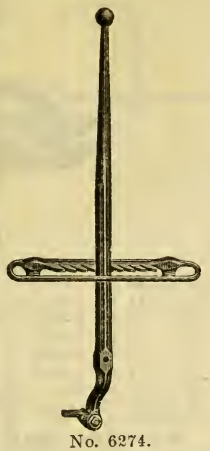
Note. — The only Rolled Steel Brake made. Pawl, Circle and both Levers all Rolled Steel.

Net price each 45c

BRAKE LEVERS.



No. 6272.



No. 6274.

Description of No. 6272.

A	B	C	D	
24	28	32	36	in. Lever.
12½	13½	14¾	14¾	in. length of Ratchet.
5/16	⅜	7/16	7/16	in. Connecting Bolt.
9	9½	10	10	in. height from bottom Bracket hole to c. of Knife.
$0.33	.50	.65	.70	net price each.

Description of No. 6274.

A	B	C	
24	28	32	in. long.
5/16	⅜	7/16	in. Connecting Bolt.
12½	13½	14¾	in. length of Ratchet.
11	11	11	in. height from bottom Bracket hole to c. of Knife.
$0.36	.50	.60	net price each.

FOOT LEVERS.

No. 6282.

SIDE PULL.

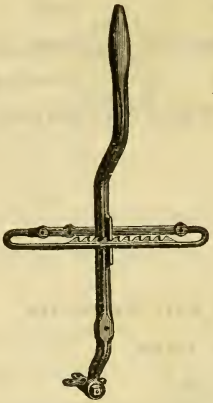
A	B	
7	10	in. Foot Lever.
3½	4	in. outside Arm.
3¼	4	in. between Lever. and Arm.
$0.27	.35	net price each.

No. 6283.

INSIDE PULL.

19½ in. length of Lever.
8 in. drop of Brace.
10½ in. Toe Board.
90c. net price each.
Used with No. 6392 Center Brake.

BRAKE LEVERS.



No. 6275.

No. 6277.

Description of No. 6275.

25 in. Lever.
19 in. length of Ratchet.
⅝ in. Bracket hole.
5/16 in. Connecting Bolt.
10½ in. height of bottom Bracket hole to c. of Knife.
45c. net price each.

Description of No. 6277.

A	B	
30	31	in. length of Lever.
For light	For heavy	farm wagon work.
60c	65c	net price each.

To be attached to the side of the body. Fitted ready for use.

No. 6278.

Same as No. 6277, except it has a Foot projection and is adapted to attach to the bottom and sides of body.

A	B	
30	31	in. length of Lever.
For light	For heavy	farm wagon work.
60c	65c	net price each.

FOOT LEVERS.

No. 6285.

INSIDE PUSH.

9 in. Long Lever.
2¾ in. Short Lever.
½ in. Connecting Rod end.
47c net price each.

No. 6287.

INSIDE PULL.

A	B	
9	10	in. length of Lever.
8½	8½	in. length of Plates.
⅜	7/16	in. Connecting Rod end.
31c	35c	net price each.

INSIDE PUSH.

AX	BX	
9	10	in. length of Lever.
8½	8½	in. length of Plates.
½	⅝	in. Connecting Rod end.
31c	35c	net price each.

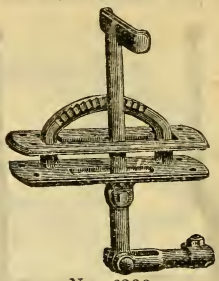
FOOT LEVERS.

No. 6290.

WITH RATCHET SIDE PULL.

A	B	
14½	14½	in. length of Lever.
12½	12½	in. length of Ratchet.
⅜	7/16	in. Connecting Rod end.
$0.40	$0.40	Net price each.

FOOT LEVERS.
WITH RATCHET INSIDE. PUSH.



No. 6286.

A	B	
11	11	in. length over all.
8	8	in. length of long end.
3	3	in. length of short end.
9	9	in. length of Plate.
4	4	in. radius of Ratchet.
½	⅝	in. Connecting Rod end.
$0.50	.52	Net price each.

TURNBUCKLE AND WROUGHT STUB ENDS.

Threaded.

No. 6382.

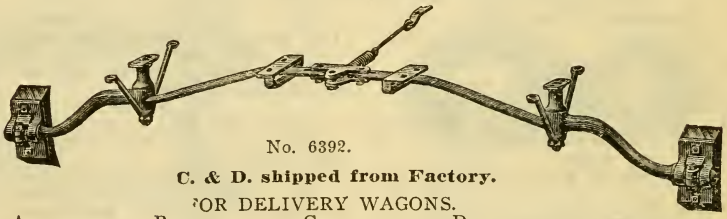
C, ½ in. Rod, each.....$0.20
D, ⅝ in. Rod, each..... .25

RATCHET SIDE PULL ROD END.

No. 6295.

	A	B	C	D	F
Length	4¾	4⅞	5⅛	4⅞	4⅞
Connecting rod	⅜	7/16	½	½	⅝
Net price each....	$0.07	.08	.09	.09	.11

RELIABLE WAGON BRAKES.
BRAKE BEAMS.



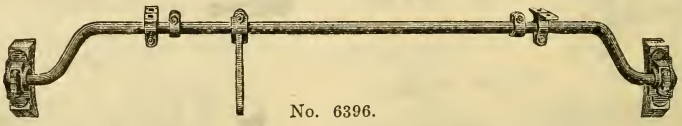
No. 6392.

C. & D. shipped from Factory.

FOR DELIVERY WAGONS.

A	B	C	D	
1	1	1⅛	1⅛	in. Shoe Journal Box.
38 to 50	38 to 56	38 to 50	38 to 56	in. Body
6¾	6¾	6¾	6¾	in. drop to center of Shoe.
½	½	⅝	⅝	in. for Connecting Rod.
2¾	2¾	3¾	3¾	in. width of Shoe.
4 ft. 8 in.	5 ft. 2 in.	4 ft. 8 in.	5 ft. 2 in.	Track.
$3.40	$3.50	$5.00	$5.25	Net price each.

BRAKE BEAMS.



No. 6396.

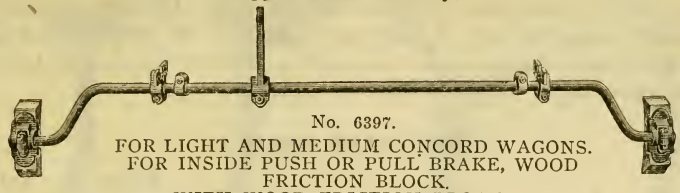
FOR SPRING WAGONS AND SIMILAR VEHICLES.
FOR INSIDE PUSH OR PULL BRAKE WOOD FRICTION BLOCK.
WITH WOOD FRICTION BLOCK.

A	B	D	
⅞	1	1⅛	in. Brake Roller.
5⅞	6¼	6⅝	in. length Lever center to center.
1¾	1¾	2⅛	in. width of Shoe.
5/16	5/16	⅜	in. Connecting Rod Bolt.
$1.55	$1.70	$2.30	Net price each.

IMPORTANT.—In ordering, always state whether 4 ft. 8 in. or 5 ft. 2 in. Track is wanted.

BRAKE BEAMS.

Shipped from Factory.

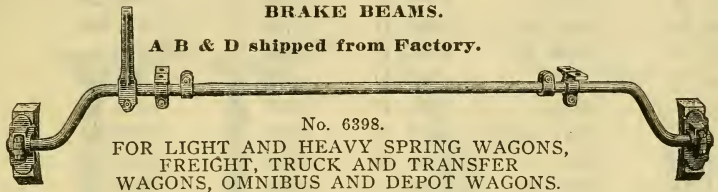


No. 6397.
FOR LIGHT AND MEDIUM CONCORD WAGONS.
FOR INSIDE PUSH OR PULL BRAKE, WOOD FRICTION BLOCK.
WITH WOOD FRICTION BLOCK.

A	B	D	
7/8	1	1 1/8	in. Brake Roller.
5 7/8	6 1/4	6 5/8	in. length Lever center to center.
1 3/4	1 3/4	2 1/8	in. width of Shoe.
5/16	5/16	3/8	in. Connecting Rod Bolt.
$1.55	$1.70	$2.30	Net price each.

BRAKE BEAMS.

A B & D shipped from Factory.

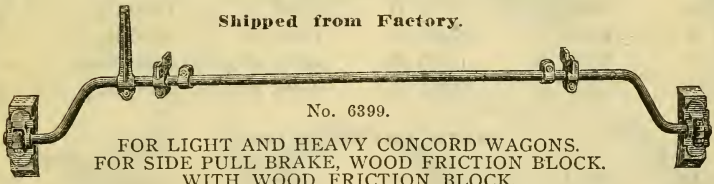


No. 6398.
FOR LIGHT AND HEAVY SPRING WAGONS, FREIGHT, TRUCK AND TRANSFER WAGONS, OMNIBUS AND DEPOT WAGONS.
FOR SIDE PULL BRAKE, WOOD FRICTION BLOCK.
WITH WOOD FRICTION BLOCK.

A	B	C	D	E	F	G	
7/8	1	1	1 1/8	1 1/8	1 1/4	1 1/4	in. Brake Roller.
7	7 1/2	7 1/2	8	8	8 1/2	8 1/2	in. length Lever center to center.
1 3/4	1 3/4	2 1/8	2 1/8	3	3	4	in. width of Shoe.
5/16	5/16	3/8	3/8	7/16	7/16	7/16	in. Connecting Rod Bolt.
$1.55	$1.70	$1.90	$2.30	$2.50	$3.25	$3.40	Net price each.

BRAKE BEAMS.

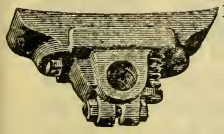
Shipped from Factory.



No. 6399.
FOR LIGHT AND HEAVY CONCORD WAGONS.
FOR SIDE PULL BRAKE, WOOD FRICTION BLOCK.
WITH WOOD FRICTION BLOCK.

A	B	C	D	E	
7/8	1	1	1 1/8	1 1/8	in. Brake Roller.
7	7 1/2	7 1/2	8	8	in. length Lever center to center.
1 3/4	1 3/4	2 1/8	2 1/8	3	in. width of Shoe.
5/16	5/16	3/8	3/8	7/16	in. Connecting Rod Bolt.
$1.55	$1.70	$1.90	$2.30	$2.50	Net price each.

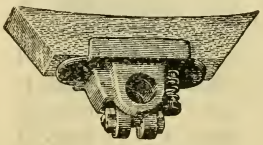
BRAKE SHOES WITH SLIP BLOCKS.



No. 6369.
Iron Friction Block.
With perfect contact attachment.

A	B	C	E	
7/8	1	1	1 1/8	in. brake roller.
1 3/4	1 3/4	2 1/8	3	in. width of shoe.
7	7	7 1/2	8	in. length of shoe.
$0.90	.95	1.30	2.25	Net price per pair.

BRAKE SHOES WITH SLIP BLOCKS.



No. 6362.
Wood Friction Blocks with perfect contact attachment.

A	B	C	E	
7/8	1	1	1 1/8	in. brake roller.
1 3/4	1 3/4	2 1/8	3	in. width of shoe.
7	7	7 1/2	8	in. length of shoe.
$0.60	.66	74	1.00	Net price per pair.

BRAKE COMBINATIONS.

For our customers' convenience in ordering we herewith list a few of the most popular brake combinations, the component parts of which may be found on the three preceding pages. In ordering always specify whether 4 foot 8 inch track or 5 foot 2 inch track is desired; 4 foot 8 inch track will always be sent unless otherwise specified.

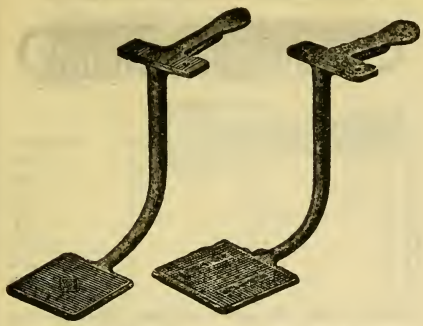
FOOT LEVER BRAKES.

Comb. Nos.	Lever.	Rod End.	Brake.	Wagon Capacity.	Net Prices per set.
60 A	6285	6295 D	6396 A	1000 lbs.	$2.11
60 B	6285	6295 D	6396 B	1500 lbs.	2.26
61 A	6287 A	6295 A	6396 A	1000 lbs.	1.93
61 B	6287 A	6295 A	6396 B	1500 lbs.	2.11
61 D	6287 B	6296 B	6396 D	2800 lbs.	2.73
62 A	6286 A	6295 D	6396 A	1000 lbs.	2.12
62 B	6286 A	6295 D	6396 B	1500 lbs.	2.26
62 D	6286 B	6295 F	6396 D	2800 lbs.	2.93
70 A	6285	6295 D	6397 A	1000 lbs.	2.16
70 B	6285	6295 D	6397 B	1500 lbs.	2.26
71 A	6287 A	6295 A	6397 A	1000 lbs.	1.93
71 B	6287 A	6295 A	6397 B	1500 lbs.	2.12
71 D	6287 B	6295 B	6397 D	2800 lbs.	2.73
72 A	6286 A	6295 D	6397 A	1000 lbs.	2.16
72 B	6286 A	6295 D	6397 B	1500 lbs.	2.36
72 D	6286 B	6295 F	6397 D	2800 lbs.	2.90
84 A	6290 A	6295 A	6398 A	1000 lbs.	2.00
84 B	6290 A	6295 A	6398 B	1500 lbs.	2.20
84 D	6290 B	6295 B	6398 D	2800 lbs.	2.80
85 A	6282 A	6295 B	6398 A	1000 lbs.	2.00
85 B	6282 A	6295 A	6398 B	1500 lbs.	2.16
85 C	6282 B	6295 B	6398 C	2400 lbs.	2.45
85 D	6282 B	6295 B	6398 D	2800 lbs.	2.85

HAND LEVER BRAKES.

80 A	6272 A	6295 A	6398 A	1000 lbs.	$1.95
80 B	6272 A	6295 A	6398 B	1500 lbs.	2.15
80 C	6272 B	6295 B	6398 C	2400 lbs.	2.50
80 D	6272 B	6295 B	6398 D	2800 lbs.	2.90
80 E	6272 C	6295 C	6398 E	3000 lbs.	3.24
80 F	6272 D	6295 C	6398 F	3200 lbs.	4.04
80 G	6272 D	6295 C	6398 G	3200 lbs.	4.19
81 A	6274 A	6295 A	6398 A	1000 lbs.	1.98
81 B	6274 A	6295 A	6398 B	1500 lbs.	2.13
81 C	6274 B	6295 B	6398 C	2400 lbs.	2.48
81 D	6274 B	6295 B	6398 D	2500 lbs.	2.90
81 E	6274 C	6295 C	6398 E	3000 lbs.	3.24
82 B	6278 A	6295 B	6398 B	1500 lbs.	2.50
82 D	6278 B	6295 B	6398 D	2800 lbs.	3.08
83 D	6275	6295 B	6398 D	2800 lbs.	2.83
90 D	6275	6295 B	6399 D	2800 lbs.	2.83

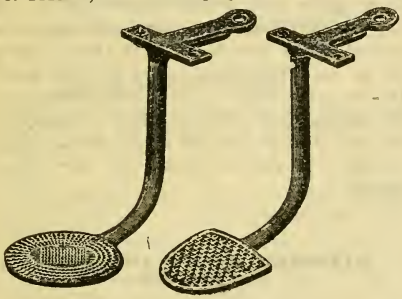
ROLLED STEEL STEPS.



No. 1405. No. 1415.

Sizes. Net price per pair.

No. 1405 B, 6¾ in. drop, projection 5 in..25c
No. 1415 A, 6 in. drop, projection 6 in..30c
No. 1415 B, 7 in. drop, projection 5 in..30c

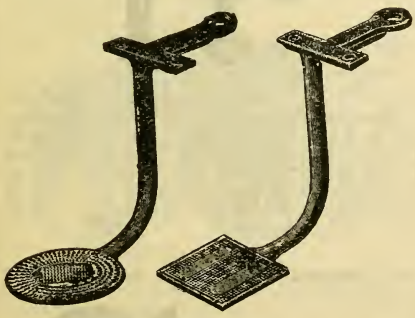


No. 1428. No. 1439.

No. 1428 A, 6 in. drop, projection 6 in..30c
No. 1430 A, 5½ in. drop, projection 5 in..30c

RUBBER PAD STEPS.

With Rolled Steel Shanks.



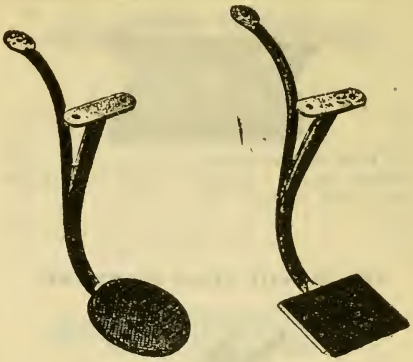
No. 1320. No. 1305.

Sizes. Net price per pair.

No. 1320 A, 6 in. drop, projection 6 in....50c
No. 1320 B, 7 in. drop, projection 5 in....50c
No. 1305 A, 6 in. drop, projection 6 in....55c
No. 1305 B, 7 in. drop, projection 5 in....55c

Note.—Order by number.

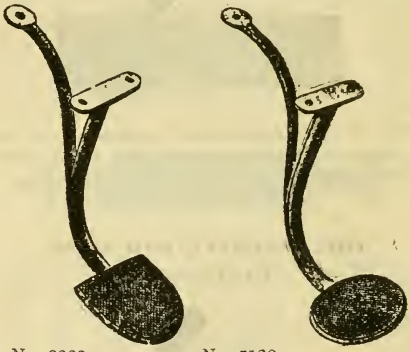
MALLEABLE RUBBER PAD STEPS.



No. 3122. No. 3121.

Sizes. Net price per pair.

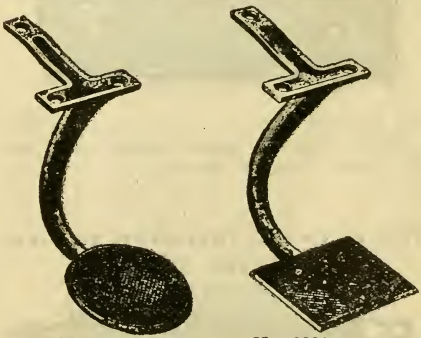
No. 3122 A, 6½ in. drop, 6¼ in. projection.65c
No. 3121 A, 6½ in. drop, 6 in. projection.65c



No. 3332. No. 3123.

Sizes. Net price per pair.

No. 3123 B, 6½ in. drop, 6¼ in. projection.65c
No. 3342 A, 5¼ in. drop, 5½ in. projection.60c



No. 3120. No. 3331.

Sizes. Net price per pair.

No. 3120 A, 6½ in. drop, 6 in. projection..65c
No. 3331 A, 5¼ in. drop, 5 in. projection..60c

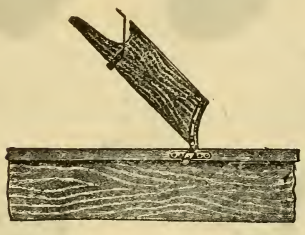
These are the finest Rubber Steps made. Very handsome and for first class work. Order by number.

REVERSIBLE SEAT FASTENER.

Net price per dozen sets.....65c

Note.—Easily fastened and unfastened. Simple and strong.

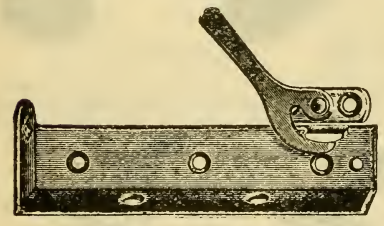
THE HANDY SEAT FASTENER.



Net price per dozen sets.....$1.35

Note.—A very convenient and handy Seat Fastener.

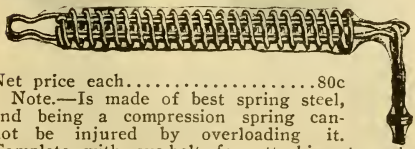
THE SECURITY END GATE FASTENER.



Net price per set.....20c

Note.—There is nothing better made for the purpose than the Security.

THE RAYMOND IMPROVED TONGUE AND POLE SPRING.



Net price each.....80c

Note.—Is made of best spring steel, and being a compression spring cannot be injured by overloading it. Complete with eye-bolt for attaching to pole or tongue. The total length is 18 inches.

KEYSTONE BRAKE SPRINGS.

Sizes in stock.

Length Over all.	Outside Diam.	Size Wire.	Net price each.
4 in.	$\frac{11}{16}$	12	10c
6 in.	$\frac{7}{8}$	10	15c
8 in.	$1\frac{1}{16}$	9	18c
10 in.	$1\frac{1}{8}$	8	24c
12 in.	$1\frac{1}{4}$	7	30c
14 in.	$1\frac{3}{8}$	6	40c
16 in.	$1\frac{9}{16}$	5	60c

Note.—Our Keystone Brake Springs are made of high grade spring steel and are far superior to the common coppered market wire springs sometimes sold. They can be distinguished from others by the blue temper color, which gives a fine finish. They are not japanned except to order. We carry in stock the seven sizes listed. The 14-inch spring can be used for heavy brakes or light poles. The 16-inch spring is our regular tongue, or pole spring, and will easily hold a weight of 150 lbs. Heavier pole and tongue springs made to order, in fact we make any size spring wanted.

FINISHED SHAFT AND POLE COUPLINGS.

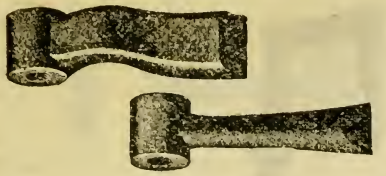
Complete With Eyes.

Sizes.		Net price per pair.	Net price per doz.
$\frac{7}{8}$ in. Light	$\frac{5}{16}$ in. Bolt	22c	$2.25
1 in. Light	$\frac{3}{8}$ in. Bolt	22c	2.25
1 in. Heavy	$\frac{7}{16}$ in. Bolt	24c	2.45
$1\frac{1}{8}$ in. Heavy	$\frac{7}{16}$ in. Bolt	30c	3.75
$1\frac{1}{4}$ in. Heavy	$\frac{7}{16}$ in. Bolt	38c	4.40

FRONT BAR EYE BOLTS.

Size.	Net price each.
$\frac{7}{16}$ inch Shank	8c
$\frac{1}{2}$ inch Shank	11c

SHAFT AND POLE EYES.



Net price per pair.

Sizes.	Shaft.	Pole.
⅞ x 5/16 inch	8c	8c
1 x ⅜ inch	8c	8c
1 x 7/16 inch	8c	8c
1⅛ x 7/16 inch	10c	10c
1¼ x 7/16 inch	12c	12c

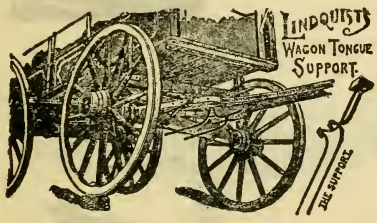
STEEL SOCKET SHAFT ENDS.

It costs less and is better than repairing any other way. Easy to put on either new or old work.

Sizes.	Net price each.
1½ for Buggies	25c
1⅝ for Surreys, Carts, Spring Wagons	35c

The Steel Socket Shaft Ends are used for repairing broken shafts on Buggies, Carts and Express Wagons, in the short time of five or ten minutes, made of Double Tube Steel, the inner tube being pressed in the outer tube, giving them so much greater strength that the shaft will break in any other place than where repaired, and being fully japanned they are equal to the best leather finish when on the shaft.

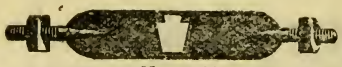
LINDAQUIST WAGON TONGUE SUPPORT.



Sizes.	Net price each.
No. 1, ⅝ in. steel, suitable for all ordinary purposes	$1.15
No. 2. ¾ in steel, suitable for the heaviest purposes	1.40

Note.—Acknowledged to be the best support for lumber wagon tongues on the market. Easily and quickly applied, it takes the weight from the horses' shoulders, keeps the tongues straight, and at the right height for hitching up. A ready seller, and once used always used.

AXLE CLIPS.



No. 2100.
5/16 inch Shank. ⅞ inch Wide.

Sizes.		Net price per doz.
No. 2¼.	Flat part 2¼ in	18c
No. 2¾.	Flat part 2¾ in	18c
No. 3¼.	Flat part 3¼ in	18c
No. 3¾.	Flat part 3¾ in	20c
No. 4½.	Flat part 4½ in	25c
No. 4¾.	Flat part 4¾ in	28c
No. 5¼.	Flat part 5¼ in	30c
No. 6 .	Flat part 6 in	32c

NORWAY IRON AXLE CLIPS.

No. 2105.
5/16 inch Shank. ⅞ inch Wide.

Sizes.		Net price per doz.
No. 2¼.	Length of Flat part 2¼ in	21c
No. 2¾.	Length of Flat part 2¾ in	21c
No. 3¼.	Length of Flat part 3¼ in	21c
No. 3¾.	Length of Flat part 3¾ in	24c
No. 4¼.	Length of Flat part 4¼ in	26c
No. 4¾.	Length of Flat part 4¾ in	30c
No. 5¼.	Length of Flat part 5¼ in	33c
No. 6.	Length of Flat part 6 in	38c

HEAVY AXLE CLIPS.

No. 2108.
⅜ in. Shank. 1¼ in. Wide.

Sizes.		Net price per doz.
No. 3½.	Flat part 3½ inches	24c
No. 4.	Flat part 4 inches	27c
No. 4½.	Flat part 4½ inches	30c
No. 5.	Flat part 5 inches	33c
No. 5½.	Flat part 5½ inches	36c
No. 6.	Flat part 6 inches	40c
No. 6½.	Flat part 6½ inches	45c
No. 7.	Flat part 7 inches	50c

SPRING BAR CLIPS.

5/16 inch Shank. ⅝ inch Wide.

Sizes.		Net price per doz.
No. 4.	Flat part 4 inches	25c
No. 4¾.	Flat part 4¾ inches	30c
No. 5¼.	Flat part 5¼ inches	33c
No. 5¾.	Flat part 5¾ inches	35c
No. 6⅜.	Flat part 6⅜ inches	38c
No. 7.	Flat part 7 inches	42c
No. 7¾.	Flat part 7¾ inches	45c

BREWSTER SIDE BAR CLIPS.

No. 2110.
Long End 2 inch, Short End 1¼ inch.
Shanks 5/16 inch.

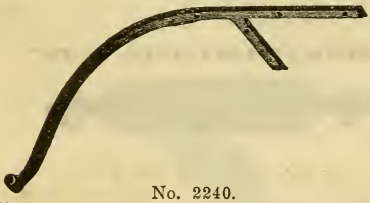
Sizes.		Net price per doz.
No. 3.	Flat part 3 inches	20c
No. 3¾.	Flat part 3¾ inches	24c
No. 4¼.	Flat part 4¼ inches	28c
No. 4¾.	Flat part 4¾ inches	32c

TIMKEN SIDE BAR CLIPS.

Both ends 2¼ inches long, Shank 5/16 inch diameter.

Sizes.		Net price per doz.
No. 2½.	Length of Flat part 2½ inches	28c
No. 3.	Length of Flat part 3 inches	30c

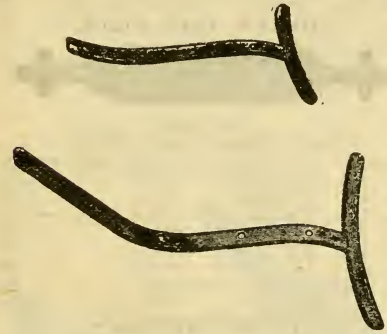
FINISHED BEVELED EDGE SHAFT IRONS.



No. 2240.

Sizes.				Net price per pair.
1⅛ Wide,	¼ Thick,	⅞ Eye,	⅜ Bolt	37c
1¼ Wide,	¼ Thick,	1 Eye,	⅜ Bolt	41c
1⅛ Wide,	5/16 Thick,	1 Eye,	7/16 Bolt	41c
1¼ Wide,	5/16 Thick,	1 Eye,	7/16 Bolt	44c

ROLLED STEEL POLE "T" IRONS.



Sizes.	Net price each.
Top T ⅞x¼ in., 10 in. long, Shank ⅞x¼ in., 11½ in. long	15c
Bottom T 1x1¼ in., 9¾ in. long, Shank 1¼x¼ in., 19¾ in. long	19c

ROLLED STEEL POLE HAMMER STRAPS.

Net price each 8c

FINISHED ROLLED STEEL POLE BRACES.

No. 2275.

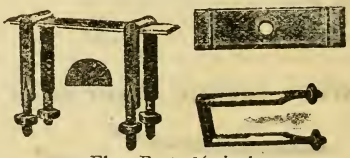
Sizes.				Net price per pair.
1 in. Eye for	⅜ Bolt	½ in. round		47c
1 in. Eye for	7/16 Bolt	9/16 in. round		48c
1⅛ in. Eye for	7/16 Bolt	9/16 in. round		49c

SHORT SPRING CLIPS.

No. 2124.

Sizes.		Net price per doz.
1¼x3	Leaf	35c
1¼x4	Leaf	35c
1¼x5	Leaf	35c
1⅜x4	Leaf	35c
1⅜x5	Leaf	40c
1½x4	Leaf	45c
1½x5	Leaf	45c

THREE PIECE BUGGY SADDLE CLIPS.

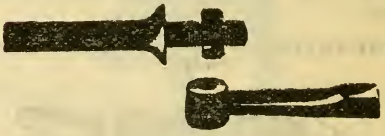


Flat Part ½ inch.

Half Round Shanks 5/16 inch.

Sizes.		Net price per doz. sets.
1¼x2¼	Flat part	80c
1¼x2½	Flat part	80c
1¼x2¾	Flat part	80c
1¼x3	Flat part	80c
1¼x3¼	Flat part	85c
1¼x3½	Flat part	85c
1⅜x2½	Flat part	80c
1⅜x3½	Flat part	90c
1½x2½	Flat part	90c
1½x3	Flat part	90c
1½x3½	Flat part	95c
1½x4	Flat part	95c

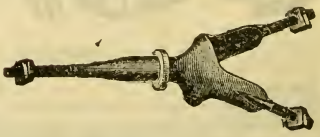
CANOPY TOP STANDARDS AND SOCKETS.



Standard. Socket.

Sizes.	Net price per doz.
Canopy Top Standards	95c
Canopy Top Sockets	72c

FINISHED KING BOLTS.



Flanged Pattern.

Sizes.	Net price each.
No. 1, ½ inch Shank	16c
No. 2, 9/16 inch Shank	17c
No. 3, ⅝ inch Shank	21c
No. 4, ¾ inch Shank	30c

FINISHED KING BOLT YOKES.

No. 3. Collar Pattern. No. 4. Collar Pattern with Brace.

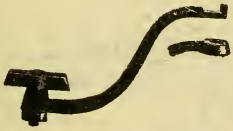
Sizes. Net price each.
No. 3, Collar Pattern 10c
No. 4, Collar Pattern.....20c

KING BOLT YOKE AND BRACE.

No. 130. Double Reach.

Sizes. Net price each.
No. 130, Double Reach.....25c

KING BOLT YOKE AND BRACE.



Nos. 54 and 50, Single Reach.

Sizes. Net price each.
No. 54, Single Reach.....25c
No. 50, Single Reach..... .....25c

FLAT PATTERN HEAD BLOCK PLATE.

Wrought Iron.
Cut represents the Underside.

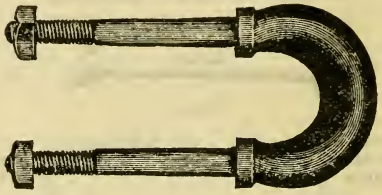
Sizes. Net price each.
No. 1, For 1¼ in. Spring and for No. 1 King Bolt 27c
No. 2, For 1¼ in. Spring and for No. 2 King Bolt 27c
No. 3, For 1⅜ in. Spring and for No. 2 King Bolt 30c
No. 4, For 1½ in. Spring and for No. 3 King Bolt 35c

FORGED STEEL CLEVIS.

No. 20 CLEVIS.

Net price each.
No. 20, Small Clevis, 1¼ wide, 1⅜ open, ¾ inch diam. at bend.....12c
No. 20, Large Clevis, 1½ wide, 1¾ open, ⅞ inch diam. at bend.....17c

FORGED STEEL DRAW BOLTS.



No. 21. DRAW BOLTS.

Net price each.
No. 21, Small Draw Bolts, open 1⅞ center to center, ¾ diam., $\frac{5}{16}$ shank.....11c
No. 21, Medium Draw Bolts, open 1⅞ center to center, ⅞ diam., ⅜ shank.....12c
No. 21, Large Draw Bolts, open 2⅛ center to center, $\frac{15}{16}$ diam., ⅜ shank.....14c

DOUBLE PERCH HEAD BLOCK. PLATES.

No. 102. Socket Pattern.

Sizes. Net price each.
No. 1, for 1¼ Spring, No. 1 King Bolt, 12 in. Circle.....80c
No. 2, for 1¼ Spring, No. 2 King Bolt, 12 in. Circle $1.00

DOUBLE PERCH HEAD BLOCK PLATES.

No. 98. Socket Pattern.

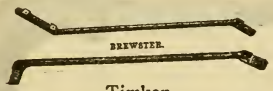
Sizes. Net price each.
No. 1, for 1¼ Spring, No. 1 King Bolt, 12 in. Circle 80c
No. 2, for 1¼ Spring, No. 2 King Bolt, 12 in. Circle $1.00

FINISHED HEAD BLOCK AND PERCH PLATES.

No. 92 For Perches.

Sizes.	Net price each.
No. 1¼ in. Spring, 12 in. Circle and ¾ in. Perch	75c
For 1¼ in. Spring, 12 in. Circle and ⅞ in. Perch	80c

FINISHED STAY BRACES.

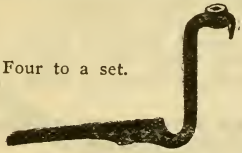


Timken.

Sizes.	Net price per pair.
Brewster	13c
Timken	18c

FINISHED BODY LOOPS.

Four to a set.



With 12 in. Cover Flat for Buggies.

Size of oval ⅞x$\frac{9}{16}$. Net price per set.

No. 1118A, 5 inch Drop, 7 inch Flat	45c
No. 1118C, 5½ inch Drop, 7 inch Flat	45c
No. 1118E, 6 inch Drop, 7 inch Flat	45c
No. 1118G, 6½ inch Drop, 7 inch Flat	45c
No. 1128A, 5 inch Drop 22 and 30 inch Flat	65c
No. 1128C, 5½ inch Drop, 22 and 30 inch Flat	65c
No. 1128E, 6 inch Drop, 22 and 30 inch Flat	65c
No. 1128G, 6½ inch Drop 22 and 30 inch Flat	65c

No. 1128—2 pieces 22 inch. Flat and 2 pieces 30 inch Flat to set.

STRAIGHT SURREY LOOPS.

SURREY.

Net price per pair.

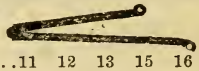
No. 1160D, 11 inch oval, 12 inch Flat.....52c

Oval measurements are between inside of head and flat part on top of loop.

SWAGED STUMP JOINTS.

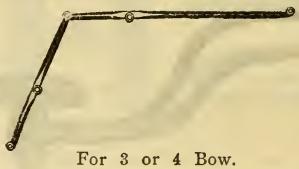
Sizes.	Net price per doz.
$\frac{9}{16}$x½ inch	$1.10
⅝x½ inch	1.30

CONCEALED JOINTS.



Sizes	11	12	13	15	16	17	18 in.
Net price, pair	8c	8c	8c	9c	10c	11c	12c

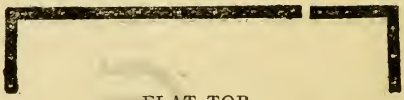
FINISHED TOP BRACES.



For 3 or 4 Bow.

	Net price per pair.
3 Bow Japanned	50c
4 Bow Japanned	50c

WROUGHT BODY CORNER IRONS.



FLAT TOP.

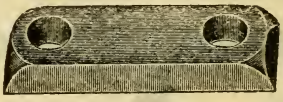
Width.	Net price per set.
¼ and $\frac{5}{16}$ inch	7c
⅜ and $\frac{7}{16}$ inch	8c
½ inch	9c

OVAL TOP.

Width.	Net price per set.
¼ and $\frac{5}{16}$ inch	16c
⅜ inch	18c

Two long and two short connections in a set.

WROUGHT IRON CLIP TIES.



Sizes.	Net price per lb.
⅞, 1, 1⅛, 1¼, 1⅜, 1½x$\frac{5}{16}$ Hole Plain	5c
1, 1⅛, 1¼, 1⅜, 1½, 1¾x⅜ Hole Plain	5c

FELLOE PLATES.

Ten Pounds in a Box.

Sizes.

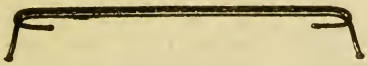
¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1½, 1¾, 1⅞, and 2 in.

Net price per lb.....5c

WROUGHT IRON TOE RAILS.

No. 1525.

Sizes.	Net price each.
No. 20, 22, 24, 26	13c
No. 28, 30	15c



No. 1510.

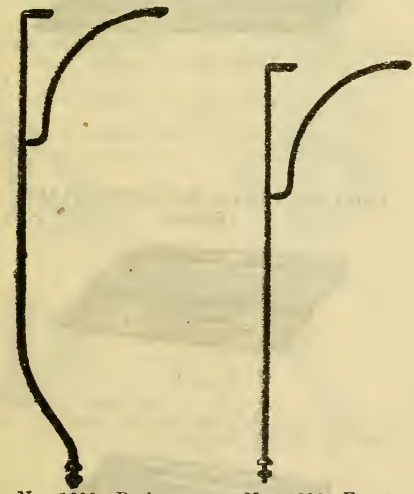
Sizes.	Net price each.
No. 20, 21, 22 inch	12c

LAZY BACK ARMS AND STANDARDS.

Two Back and Two Side Irons Make One Set.

Net price per set.
Complete, as shown in cut.....15c

FINISHED CANOPY TOP IRON.



No. 1800, Back. No. 1800, Front.

Sizes.	Net price per set.
1800, Back, ⅝ in. round, 53 in. high	$1.20
1800, Front, ⅝ in. round, 36½ in. high	1.20

Height measured from collar to top.
A set consists of four pieces.

MALLEABLE IRON TOE RAILS.

No. 10, For Piano Bodies.

Sizes.	Net price each.
No. 10, For Piano Bodies 20, 22, 24, 25 in.	$0.13

BAILEY BODY HANGERS.

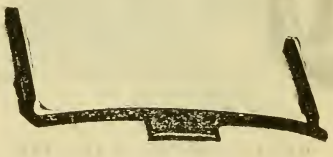
No. 1010.

Buggy Size, to Bolt on Spring.

Width, in. out to out..	18	19	20	21	22	23
Drop, inches	4	4	4	4	4	4
Net price per pair.....	$0.80	.80	.80	.80	.80	.80

Holes in Spring Pad 3½ inches center to center. Give size and number.

BAILEY BODY HANGERS.



No. 1005.

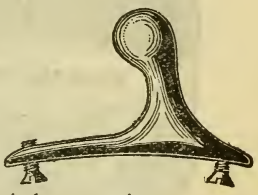
Buggy Size, to Clip on Spring.

Width, in. out to out..	18	19	20	21	22	23
Drop, in.	4	4	4	4	4	4
Net price per pair.....	$0.80	.80	.80	.80	.80	.80

Holes in Spring Pad 3½ inches, center to center. Give size and number.

READ'S REIN SUPPORTERS.

REINS
NEVER
UNDER
HORSE'S
TAIL
OR ENDS
OF HIP
STRAP.



A simple, practical, convenient, common sense device. Prevent accidents, save annoyance, add to the comforts and pleasure of driving. Their simplicity, practical workings, ornamental appearance, little cost, make them appeal strongly to the driving public. Heavily nickeled or brass plated over a heavy copper plate, or highest grade imitation rubber.

Net price per dozen pair.....$1.50

Greatest selling specialty on earth. On display cards. Nickel and Imitation Rubber retail 25 cents a pair. Brass 30 cents a pair.

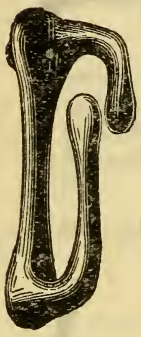
BRADLEY ADJUSTABLE FOOT RAIL.

Sizes Net price each.
20, 22, 24 in. long, 3½, 4, 4½ in. high....25c
Give height and length when ordering.

Adjustable to suit different heights of drivers. No possibility of rattle. Easily shifted and securely fastened.

READ'S REIN HOLDERS.

REINS ALWAYS IN PLACE WHERE THEY OUGHT TO BE.



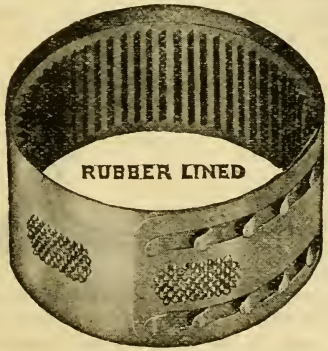
No unfastening reins, running through rings in adjusting. Simple twist of rein, it's in place and stays there. Accidents due reins catching under shaft or trace ends avoided. Simple, practical; finished heavily nickeled or brass plated over a heavy copper plate, or highest grade imitation rubber.

Net price per dozen pair $1.50

Sales more than all others comined. On display cards. Nickel and Imitation Rubber retail 25 cents a pair. Brass 30 cents a pair.

READ'S HORSE TAIL TIE.

INSTANTLY ATTACHED. DON'T IRRITATE OR INJURE HAIR. NO STRAPS TO BREAK, SHRINK, STRETCH. WONDERFUL SELLER.



Patent Pending.

A handsome device, with no hinges, buckles or metal teeth to cut the hair. Never lets go. Lined with corrugated rubber. Made of spring steel, heavily nickeled or brass plated over a heavy copper plate.

On display cards. Nickel retails 25 cents. Brass 30 cents.

Net price per dozen, Nickel $1.50
Net price per dozen, Brass 1.75

ROLLED STEEL BUGGY RUB IRONS.

Sizes. Net price per pair.
No. 1250 A, 5 in. long, ⅞ in. wide inside of flange 6c
No. 1250 B, 6 in. long, ⅞ in. wide inside of flange 6c
No. 1250 C, 7 in. long, ⅞ in. wide inside of flange 6c
No. 1252 A, 5 in. long, 1¼ in. wide inside of flange 7c
No. 1252 B, 6 in. long 1¼ in. wide inside of flange 7c
No. 1252 C, 7 in. long, 1¼ in. wide inside of flange 8c

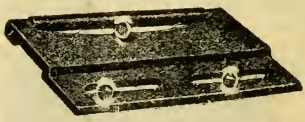
ROLLED STEEL SPRING WAGON RUB IRONS.

Sizes. Net price per pair.
No. 1254 A, 5 in. long, 1¾ in. wide inside of flange 7c
No. 1254 B, 6 in. long, 1¾ in. wide inside of flange 8c
No. 1254 C, 7 in. long, 1¾ in. wide inside of flange 9c

FANCY END ROLLED STEEL RUB IRONS.

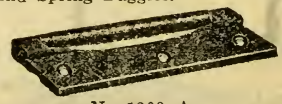
Sizes. Net price per pair.
No. 1264 A, width 2¼ in., flange 1 in., length 5 in. 7c
No. 1264 B, width 2¼ in., flange 1 in., length 6 in., ...8c
No. 1264 C, width 2¼ in., flange 1 in., length 7 in. 9c

ROLLED STEEL ROLLER CHAFE IRONS.



1205 A.

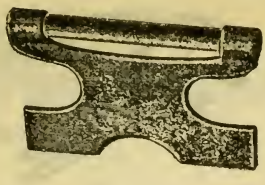
Net price per pair.
No. 1205 A, 5 in. long, 2¼ in. wide.....18c
For End Spring Buggies.



No 1200 A.

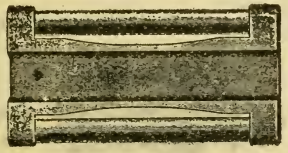
Net price per pair.
No. 1200 A, 5 in. long, 1½ in. wide.....15c
For Side Bar Buggies.

ROLLED STEEL ROLLER CHAFE IRONS.



No. 1215 A.

Net price per pair.
No. 1215 A, 4⅝ in. long, 2¾ in. wide...20c
For Stanhopes, Phaetons, etc.



No. 1225 A.

Net price each.
No. 1225 A, 5 in. long, 2½ in. wide.....20c
For cut under Jobs.

GANON ANTI-FRICTION ROLLER WEAR IRONS.

No. 1.

No. 2.

No. 3.

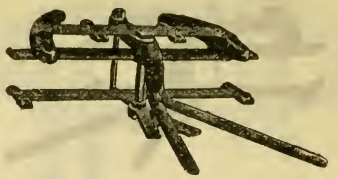
No. 4.

No. 5.

No. 6.

Sizes. Net price per pair.
No. 1, For Buggies and Surreys.....50c
No. 2, For Buggies and Surreys.....55c
No. 3, For Phaetons 55c
No. 4, For Cut under Surreys.....50c
No. 5, For Side-bar Buggies.....50c
No. 6, For Concords and Phaetons.....55c
Note.—Give number when ordering.

THE HERBRAND FIFTH WHEELS.

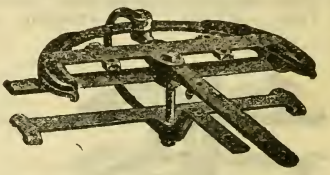


Nos. 5½ and 50½.

Sizes. Net price each.
No. 5½, One Seat.....$1.42
No. 50½, Two Seat..... 1.67

WROUGHT SETS.

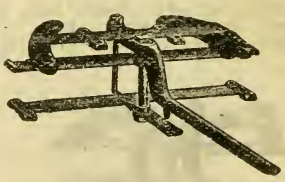
Top plate, wrought. Back coupling wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable.



Nos. 66 A and 66½.

Sizes. Net price each.
No. 66 A, for Cut-under Work, back couplings malleable $1.50
No. 66½, for Cut-under Work, back couplings wrought 1.67

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable.



Nos. 6 A and 16 A.

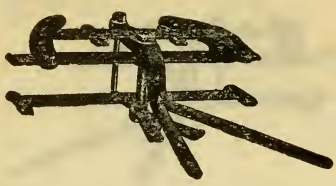
Sizes. Net price each.
No. 6½ A, One Seat, with Back Perch Irons $1.24
No. 16 A, Two Seat, with Back Perch Irons 1.50

THE A SETS.

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.

Note.—Give number when ordering.

THE HERBRAND FIFTH WHEELS.

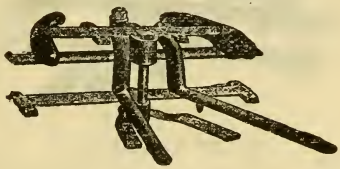


Nos. 5 A and 50 A.

Sizes. Net price each.
No. 5 A, One Seat, with Back Perch Irons $1.24
No. 50 A, Two Seats, with Back Perch Irons 1.50

THE A SETS.

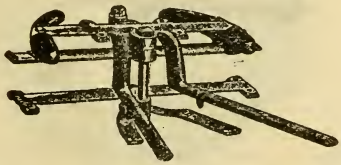
Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.



Sizes. Net price each.
1 A, for Fine Light Work, ¾ or ⅞ inch $1.50

THE A SETS.

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.



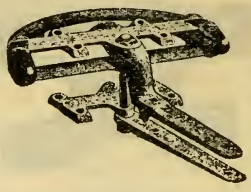
Sizes. Net price each.
No. 1½, for Fine Light Work, ¾ or ⅞ inch $1.67

WROUGHT SETS.

Top Plate, wrought. Back Coupling, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable.

Note.—Give number when ordering.

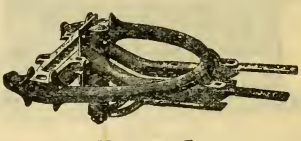
THE HERBRAND FIFTH WHEELS.



No. 985 A Malleable Sets.

Sizes. Net price each.
No. 988 A, Two Seat, with Back Perch Irons $1.00

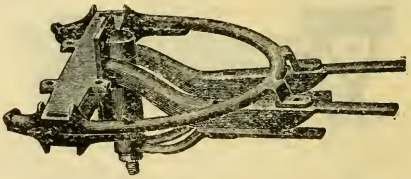
THE "E" BRAND FIFTH WHEELS.



No. 947 C.

Sizes. Net price each.
No. 947 C, One Seat, 10 in. Circle.....73c
No. 947 D, Two Seat, 12 in. Circle.....$1.10

THE "E" BRAND FIFTH WHEELS.

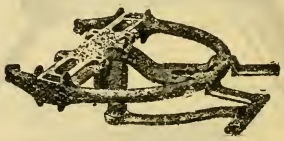


No. 952 C.

Quarter Bottom Circle.

Sizes. Net price each.
No. 952 C, One Seat, 10 in. Circle, Double Reach 65c

THE "E" BRAND FIFTH WHEELS.

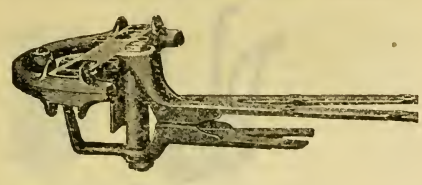


No. 965 H.

Single Straight Perch End Spring Gears.

Sizes. Net price each.
No. 965 H, 12 inch Circle, 1 Perch Buggies $1.10
Note.—Give number when ordering.

THE "E" BRAND FIFTH WHEELS.



No. 950.

For Full Drop Perch Gears End Spring or Side Bar.

Sizes.	Net price each.
No. 950 A, 9 inch Circle, One Seat, Single Perch	$ .85
No. 950 C, 9 inch Circle, One Seat, Double Perch	1.00
No. 955 A, 10 inch Circle, Two Seat, Single Perch	1.00
No. 955 C, 10 inch Circle, Two Seat, Double Perch	1.00

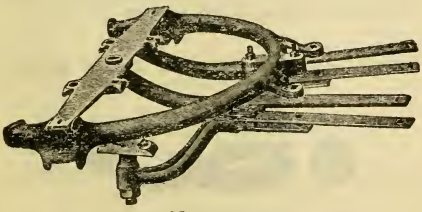
THE "E" BRAND FIFTH WHEELS.

Anti-Rattler Attachment.

Sizes.	Net price each.
No. 946 F, One Seat, Double Perch Back Perch Irons	70c

9 inch Circle, 1¼ inch Head Block, 1¼ inch Axle Bearing, ¾ inch Perch.

BREWSTER FIFTH WHEELS.



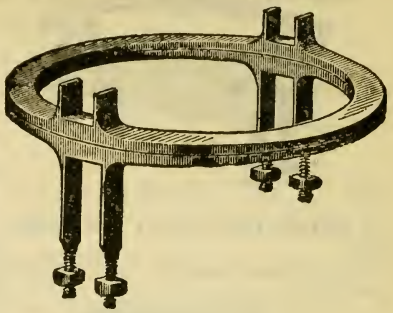
No. 930.

With Anti-Rattler Attachment. For Two Passenger Vehicles. Double Perch.

Double Saddle Clip.

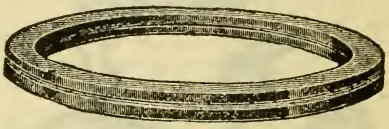
Sizes.	Net price each.
No. 930 A, 12 inch Circle, One Seat	$ .90
No. 931 A, 12 inch Circle, Two Seat	1.10

WROUGHT FIFTH WHEELS.



No. 17. Full Circle.

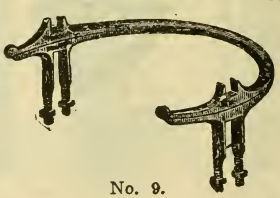
Sizes.	Net price each.
1⅛x⅜ Iron, 14 in. diam	$2.10
1¼x½ Iron, 14 and 16 in diam	2.25



No. 19.—Platform Circles.

Sizes.	Price per pair.
5/16x1¼x24 inches	$0.96
⅜x1⅜x26 inches	1.25
7/16x1½x28 inches	1.50
½x1½x30 inches	1.70

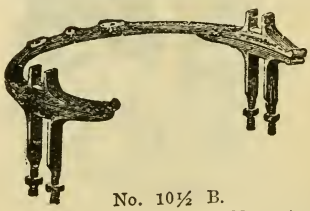
DERBY FIFTH WHEELS.



No. 9.

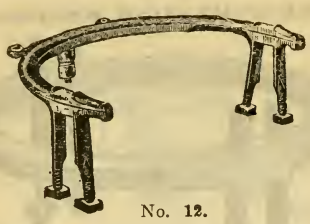
Sizes.	Net price each.
No. 9, 1 in. Axle, ⅝ Iron, 12 in. Circle	45c
No. 9, 1⅛ in. Axle, ¾ Iron, 12 in. Circle	50c
No. 9, 1⅛ in. Axle, ¾ Iron, 14 in. Circle	50c
No. 9, 1¼ in. Axle, ¾ Iron, 14 in. Circle	50c
No. 9, 1¼ in. Axle, ⅞ Iron, 14 in. Circle	75c
No. 9, 1¼ in. Axle, ⅞ Iron, 16 in. Circle	75c
No. 9, 1⅜ in. Axle, ⅞ Iron, 16 in. Circle	80c

DOUBLE REACH DERBY FIFTH WHEELS.



No. 10½ B.

Sizes.	Net price each.
No. 10½ B, 1 inch Axle, ⅝ Iron, 12 inch Circle	33c
No. 10½ B, 1⅛ inch Axle, ¾ Iron, 14 in. Circle	37c

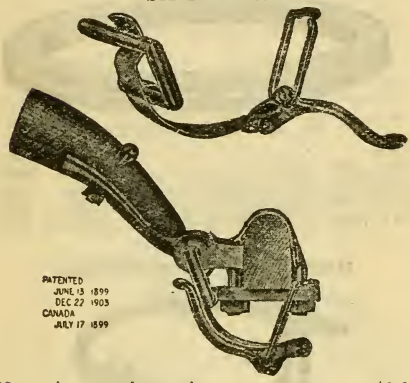


No. 12.

BREWSTER FIFTH WHEELS.

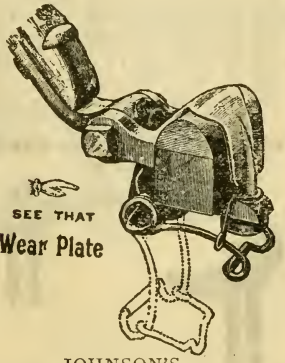
Sizes.	Net price each.
No. 12, 1 inch Axle, $\frac{11}{16}$ Iron, 12 inch Circle	60c
No. 12, 1⅛ inch Axle, ¾ Iron, 14 inch Circle	75c

IMPROVED FERNALD QUICK SHIFTERS.



Net price per doz. pairs.....$2.00

The Fernald isn't bolted to the pole or shafts and requires no special shaft eye or lug. Can be changed from shafts to pole or pole to shafts in an instant without tools of any kind.



JOHNSON'S.

Net price per doz. pair.....75c

Fits any buggy, old or new. Can be changed from shaft to pole or pole to shaft in an instant without the use of tools of any kind.

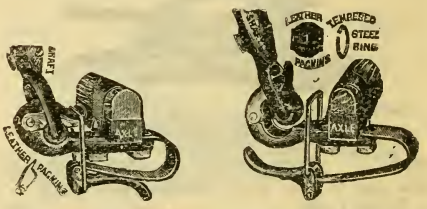
KEYSTONE WIRE.

Net price per doz. pair.....25c

BURTON'S ANTI-RATTLER.

	Net price per doz. pair
Burton's Anti-Rattler and Bolt Holder No. 1	80c

THE BRADLEY SHAFT COUPLING.



Sizes.	Net price per pair.
No. 8, Buggy size for shafts only	$0.70
No. 8, Buggy size for pole only	.70
No. 8, Buggy size for shafts and poles	.90
No. 8, Couplings only, without ends	.55
No. 9, Surrey size for shafts only	.90
No. 9, Surrey size for pole only	.90
No. 9, Surrey size for shafts and poles	1.20

Leather Packing, $1.10 per doz. pairs.

BRADLEY SHAFT AND POLE ENDS.

Shaft End.

Pole End.

Sizes.	Net price per pair.
No. 8, Shaft or Pole Ends only	25c
No. 9, Shaft or Pole Ends only	30c

MALLEABLE IRON SAND BANDS.

Sizes.	Net price per set.
2½ inch	$0.12
2¾ inch	.13
3 inch	.15
3½ inch	.18
4 inch	.20
4½ inch	.24
5 inch	.30
5½ inch	.39
6 inch	.45

No. 7412.

MALLEABLE RIM BANDS.

Sizes.	Net price per set.
2 to 2⅝ inch	$0.20
2¾ to 3 inch	.22
3⅛ inch	.24
3¼ inch	.27
3⅜ inch	.30
3½ inch	.33

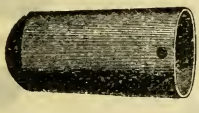
Turned, Papered. 1¾ inches deep.

NICKEL PLATED POLE TIPS.

No. 3845.

Sizes.	Net price each
1¼ inch	$0.35
1⅜ inch	.40
1½ inch	.75

PLATED SHAFT TIPS.



No. 3825.

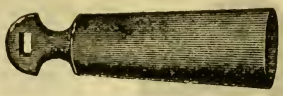
Sizes.	Net price per pair.
⅞ inch X C Plate	$0.05
1 inch X C Plate	.06
1⅛ inch X C Plate	.09
1¼ inch X C Plate	.10
⅞ inch Nickel Plate	.07
1 inch Nickel Plate	.09
1⅛ inch Nickel Plate	.12
1¼ inch Nickel Plate	.15

NICKEL PLATED NECK YOKE TIPS.

No. 3830.

Sizes.	Net price per pair.
⅞ inch	$0.45
1 inch	.50
1⅛ inch	.55

NICKEL PLATED WHIFFLETREE TIPS.



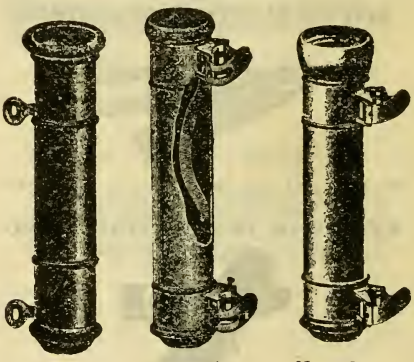
No. 90.

Sizes.	Net price per pair.
⅞ inch	$0.25
1 inch	.30
1⅛ inch	.35

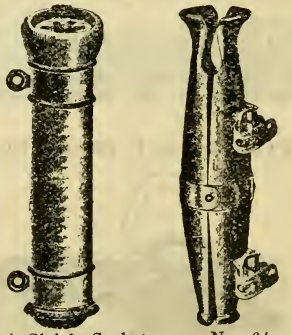
BUGGY NECK YOKE LEATHERS.

Sizes.	Net price each.
1½, 1¾ and 2 inch	$0.25

WHIP SOCKETS.



No. 10, for Wood Dash. No. 15, for Leather Dash. No. 18.



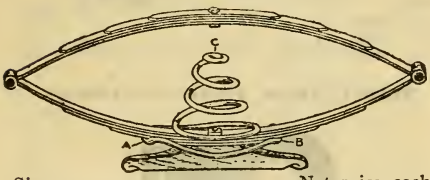
No. 22½ Sleigh Socket. No. 64.

Sizes.	Net price per doz.
No. 10. For Wood Dash	$0.65
No. 15. For Leather Dash	.75
No. 18. Black, with Band Fastener	1.25
No. 22½. Sleigh Socket	1.50
No. 64. With Band Fastener	1.00

RUBBER SPRING BUMPERS.

Size for	Net price each.
1¼ in. Springs..	$0.28
1⅜ in. Springs..	.28
1½ in. Springs..	.39
1¾ in. Springs..	.58
2 in. Springs..	.68

THE VICTOR COIL BUFFER.



Sizes.	Net price each.
No. 1, For Spring 1¼ to 1½ in.....	$0.65
No. 2, For Spring 1½ to 2 in.....	.80
No. 3, For Spring 2 to 2½ in.....	1.10

Note.—Is a coil spring and is a pronounced success over the old style rubber buffer, as it is more durable, is more firmly attached, and rides easier, outlasting the spring itself.

FITCH'S SAFETY WHIFFLETREE PIN.

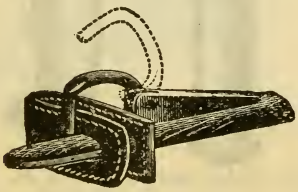
Net price per doz. pair.....$0.25

EXCELSIOR TRACE ATTACHMENT.

Sizes.	Net price Per pr.	Per doz. pr.
Japanned	$0.06	$0.50
Nickel plated	.15	1.50

Note.—The simplest, cheapest and most effective device for this purpose on the market.

FERNALD DOUBLE TRACE HOLDER.

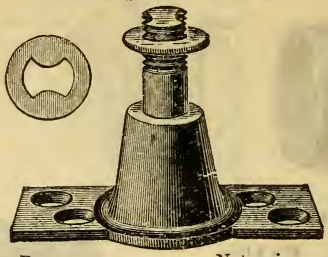


PATENTED NOV. 15, 1904.

Net price, per pair.....$0.12
Net price per doz. pair.....1.10

It releases the trace at a touch, yet when in use the trace cannot pull or work loose.

THOMAS TOP PROPS.



Screw Base. Net price per set.
Five Sets in a box.....$0.15

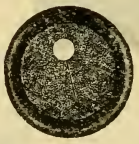
KNOB EYELETS.

Front.

Back.

Sizes.	Per doz.	Net price Per gross
No. 2	$0.05	$0.25

LARGE KNOB EYELETS.



Sizes.	Net price per gross.
No. 8, Harness Leather Centers	$0.65
Per doz	$0.08

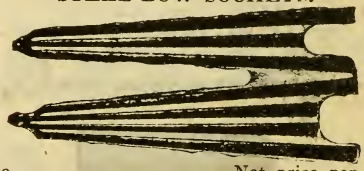
RUBBER PROP BLOCKS.

Sizes.	Net price each.
Two foot pieces ..	$0.25

TOP PROP NUTS AND RIVETS.

Sizes.	Net price per doz.
Japanned Nuts	$0.10
Japanned Rivets	.10

STEEL BOW SOCKETS.



Size.	Net price per set.
3 Bow, 29 inch.....	$0.55
4 Bow, 29 inch.....	.65

SINGLE SOCKETS FOR REPAIRING.

	Net price each.
Back Bows	$0.15
Front Bows	.12
Main Bows	.12

CARRIAGE KNOBS.

No. 8. No. 20. No. 75. No. 81.

Sizes. Net price per gross.

No. 8, Riveting, Flat Base, Hexagon, Common 40c

No. 20, Screw, Single Curtain, Hexagon Base, ⅝ screw 55c

No. 75, Drive, Double Curtain, ⅞ Round Shank 30c

No. 81, Drive, Double Curtain, ⅞ Round Shank, Barbed 30c

WROUGHT IRON CARRIAGE KNOBS.

No. 102. No. 103. No. 109. No. 110.

Sizes. Net price per gross.

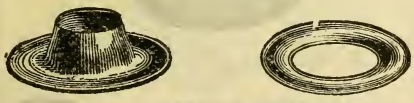
No. 102, Wrought Iron, Drive, Barbed, ⅝ or ¾ shank 40c

No. 103, Wrought Iron, Rivet, Single Curtain 40c

No. 109, Wrought Iron, Rivet, Double Curtain 45c

No. 110, Wrought Iron, Drive, Double Curtain, ¾ shank 40c

BRASS GROMMETS AND WASHERS.



Sizes. Net price per gross.

No. 0, 7/32 Hole.....35c

CANOPY TOP KNOBS AND EYELETS.

Fastener and Eyelet. Knob.

Sizes. Net price per gross.

Knobs and Eyelets $1.75

Knobs only 1.00

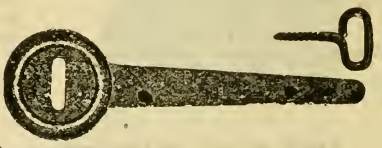
Eyelets only ..... .75

CURTAIN STRAP AND FASTENER.

Sizes. Net price per doz.

No. 6, with Rivets.....15c

WAGON CURTAIN PATCHES.



Sizes. Net price per doz.

No. 4, Complete with Staples.....24c

ROLL UP STRAPS.

Sizes. Net price per pair.

No. 2, Patent Leather.....4c

DOUBLE LOOPS AND BUCKLES.

Sizes. Net price per doz.

No. 7, Metal, Size of Loop ⅝x2 inches..20c

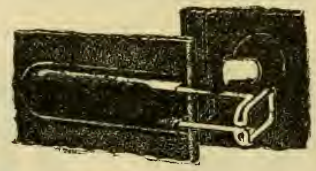
No. 1, Metal, Size of Loop ⅝x2½ inches..24c

SINGLE LOOPS AND BUCKLES.

Sizes. Net price per doz.

No. 2, Metal, Size of Loop ⅝x2 inches....25c

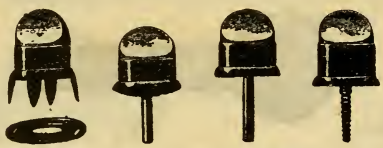
THE ADJUSTABLE CURTAIN FASTENER.



Sizes. Net price per doz.

M. S. 50c

PERFECTION CURTAIN FASTENER.



No. 1 No. 3. No. 4. No. 5.

Sizes. Net price per doz.

No. 1, For Back Stay.....45c
No. 3, For Fails, Concave Single.....45c
No. 4, To Rivet, Single Flat.....45c
No. 5, For Wood, Double Curtain.....45c
Eyelets for Perfection Curtain Fasteners..7½c

Note.—Give number when ordering. Packed one dozen in a box.

PROP BLOCK WASHERS.

Flat Center. Raised Center.

Sizes. Net price per doz.

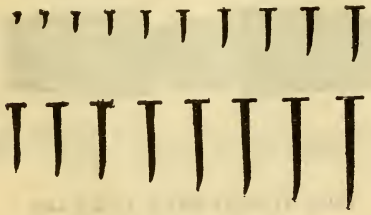
Patent Leather Flat Center, 2 in. square hole 15c
Patent Leather Raised Center, 2 in. round hole 15c

TOP PROP WASHERS.

Sizes. Net price per 100.

No. 1, for $\frac{7}{16}$ inch Prop Leather 15c

SWEDES IRON TRIMMERS' TACKS.

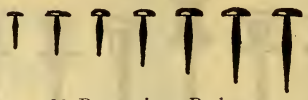


One Dozen Papers in a Package.

Sizes. Net price per paper.

2½ oz. Half Weight.....4c
3 oz. Half Weight.....4c
4 oz. Half Weight.....5c
6 oz. Half Weight.....5c
8 oz. Half Weight.....5c
10 oz. Half Weight.....5c
12 oz. Half Weight.....6c
14 oz. Half Weight.....7c
16 oz. Half Weight.....8c
18 oz. Half Weight.....8c

CAPPED HEAD JAPANNED LINING NAILS.



20 Papers in a Package.

Net price		Net price	
4 oz.	5c	10 oz.	5c
6 oz.	5c	12 oz.	5c
8 oz.	5c	14 oz.	5c

SOLID HEAD JAPANNED LINING NAILS.

In Bulk.

Sizes. Net price per lb.

4, 6, 8, 10, 12 ounces.....18c

JAPANNED TUFTING NAILS.

Sizes. Net price per paper.

Japanned 22 line, 1¼ inch.....13c
Japanned 22 line, ¾ inch.....13c

CLOTH TUFTING NAILS.

Sizes. Net price per gross.

Green and Blue Cloth 22 line, ⅛ inch 18c
Green and Blue Cloth 12 line, 14 oz. 18c
Whip Cord 22 line.....25c

SEAMING CORD.

Sizes. Net price per lb.

3 lbs. to ball.....13c

TUFTING TWINE.

Sizes. Net price per ball.

One-half pound in ball.....30c

JAPANNED TUFTING BUTTONS.

Sizes. Net price per gross.

Japanned 22 line.....10c

CLOTH TUFTING BUTTONS.

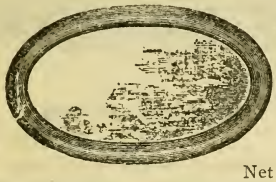
Sizes. Net price per gross.

Green or Blue Cloth.....18c
Whip Cord 20c

CURTAIN LIGHTS.

Sizes.		Net price Each	Per doz.
No. 12, 1¼x5	inches inside..	$0.05	$0.27
No. 15, 1¾x5½	inches inside..	.05	.45
No. 7, 2⅜x5	inches inside..	.12	1.10
No. 20, 2⅝x5⅛	inches inside..	.20	2.00
No. 14, 4⅛x7	inches inside..	.40	4.00
No. 18, 3x4x7 Keystone shape	inches inside, ...	.40	4.05

OVAL CURTAIN LIGHTS.



Sizes.		Net price Each	Per doz.
No. 8, 2 x5⅜	inches inside..	$0.12	$1.10
No. 10, 2⅜x4⅝	inches inside..	.15	1.30

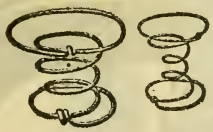
BUCKRAM.

Thirty Yards in a Piece.

Net price per yard.

Single—S—Plain finish, 40 in. wide.....$0.14

CUSHION SPRINGS.



Cushion. Back.

Sizes. Net price per doz.

Back Springs $0.12

Cushion Springs $0.20

CHASE CARRIAGE RUBBER.

The very best.

Sizes. Net price per yard.

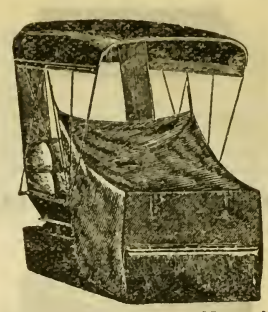
22 oz., White Back, 50 inches wide.....$0.40

22 oz., Blue Back, 50 inches wide..... .50

22 oz., Green Back, 50 inches wide..... .50

Note.—We carry only the best Carriage Rubber made.

BUGGY APRON.



Sizes. Net price each.

18 oz. Rubber, 1½ yards long.....$0.90

Complete, with Straps and Line Pockets.

Give size of Dash when ordering.

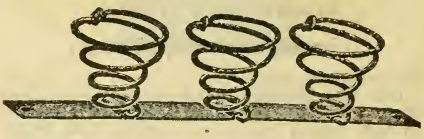
PATENT DASH LEATHER.

Net price per sq. foot.

Best Quality only, full hides.....$0.17

Best Quality only, cut..... .20

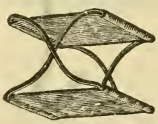
NEW SPRING CUSHION ATTACHMENT



This consists of a steel band ⅞ in. wide with grooves into which 3 springs are firmly inserted so they may not easily be detached. A set consists of 5 bands, each having 3 springs. These are to be used in stuffing box cushions.

Net price each.

Per strip of 3 springs.....$0.06

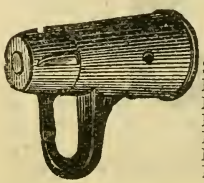


THE NEW "I. D." THIRD SEAT.

Net price each.....$0.85

It makes every buggy and sleigh you own as comfortable for three persons as two, either adult or child. By the use of this seat the third person occupies the same position (over the limbs of the other two), but all the weight and inconvenience are removed from the other occupants. It needs no fastening and fits any vehicle.

PREMIUM SPRING WHIFFLETREE HOOKS.



Sizes.		Net price per pair.
No. 1,	Size ⅞ in.	$0.19
No. 2,	Size 1 in.	.19
No. 3,	Size 1⅛ in.	.22
No. 4,	Size 1¼ in.	.25
No. 5,	Size 1⅜ in.	.28
No. 6,	Size 1½ in.	.32

COIL AXLE WASHERS.

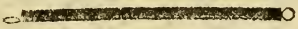
Sizes. Net price per 100.
⅞ inch Nut and Collar, 100 in Box.....15c
1 inch Nut and Collar, 100 in Box.....17c
1⅛ inch Nut and Collar, 100 in Box.....20c
1¼ inch Nut and Collar, 100 in Box.....23c

SOLID SOLE LEATHER AXLE WASHERS.

Packed in Boxes of 8 Set.

Sizes.	Net price per set.	Sizes.	Net price per set.
⅞ inch Axle	3½c	1¼ inch Axle	5c
1 inch Axle	4c	1⅜ inch Axle	6c
1⅛ inch Axle	4½c	1½ inch Axle	7c

BUGGY-BOOT SPRING.



Net price per pair.....5c

Our boot springs are 5¾ inches long, made of best spring wire. One should be attached on each side of boot, about 3 inches from hinge and down in buggy box, so as to extend them about 1 inch when boot is closed.

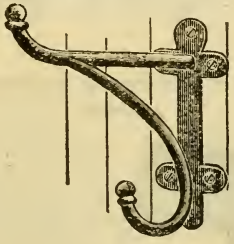
By far the best device for the purpose.

CANOPY TOP HOOKS.

Cupped Hook. No. 1. No. 2.

Net price per gross.
Cupped Screw Hook, Japanned.....75c
No. 1, Plain Hook, Japanned.....60c
No. 2, Plain Hook, Japanned.....50c

HARNESS HOOKS.

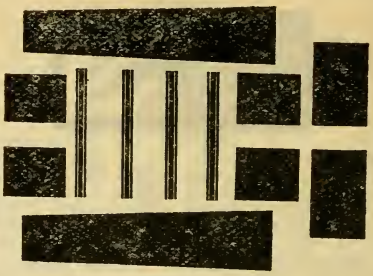


No. 6.

Net price each .....$ .25

Top hook 10½ inches, lower hook 4 inches.

SHAFT TRIMMINGS.



Net price per set.....60c

Set consists of 2 pieces patent leather 3½-x5½x36 in.; 2 pieces 4x6 in.; 2 pieces 5x6 in. and 6 harness leather straps.

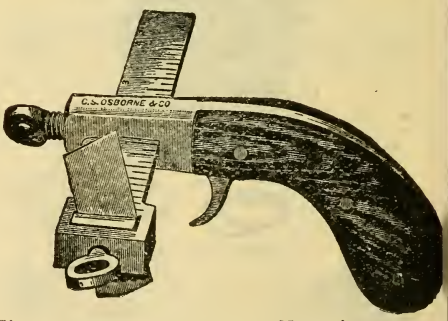
SHAFT STRAPS ONLY.

Sizes. Net price per set.
Set of 2 pieces, 8, 10 and 12 in. long.....12c
12 in. Straps separate....Net price each 2½c

SHAFT LEATHERS ONLY.

Sizes. Net price each.
Point pieces, 3½x5½x36 in.....20c
Point pieces, 4 x6 x36 in.....21c

DRAW GAUGES.



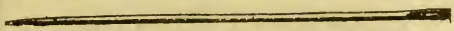
Sizes. Net price each.
No. 52½, Draw Gauges, Iron Frame...$1.35

CORNER MANGER.

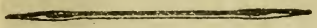
With Guard.

Size, 17x17x10 in.....Net price each, $1.00

TUFTING NEEDLES.



Sizes.	No. 97.	Net price each.
6 to 14 inches		$0.10



Sizes.	No. 97½.	Net price each.
2 inch eyes		$0.10
Glover's Needles, size 00 to 2, per paper.		.12
Harness Needles, size 0 to 4, per paper.		.12

CAP KNIVES.

No. 79.

Net price each

Round handles $0.20

No. 80.

Net price each

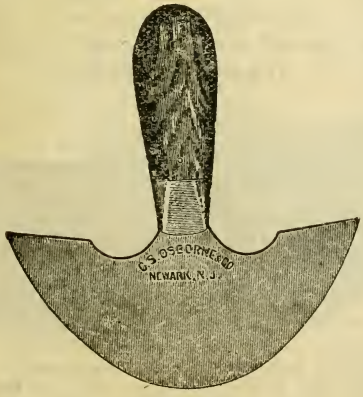
Flat Riveted handle $0.40

No. 76.

Net price each.

Square Point Roll handle..... $0.20

SADDLER'S KNIFE.

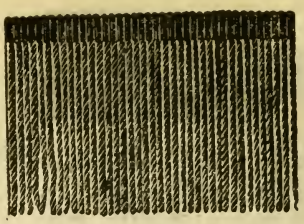


No. 70.

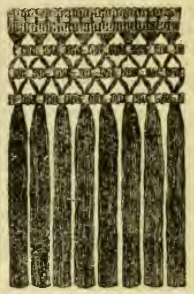
Net price eacch.

Oval Handles, 6 inch..... $1.20

CARRIAGE FRINGES.



No. 127.



No. 6000.

Net price per yard.

No. 127, 5 inch Worsted Bullion.....	$0.18
No. 6000, 6 inch, 2 Knot Worsted Gen..	.25

TRIMMERS' SHEARS.

Sizes.	Net price each.
Japanned Handle, Bent Shears, 8½ in. long	$0.85
Japanned Handle, Straight, 8½ in. long.	.70
Japanned Handle, Clearcut Bent, 10 in. long	1.25

WAGON, TRUCK AND BUGGY UMBRELLAS.

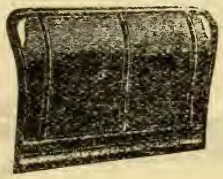
Sizes.	Net price each.
36 inch Heavy Drill—White.....	$1.35
38 inch Heavy Drill—White.....	1.50
40 inch Heavy Drill—White.....	1.65

Best Quality. Heavy steel ribs and fixtures. Handles 1¼ inch White Ash, oiled and varnished.

BUGGY DASHES.

Sizes.	Net price each.	Sizes.	Net price each.
18x11	inch.....$0.75	24x13	inch.....$1.03
19x11	inch..... .82	25x13	inch..... 1.07
20x11	inch..... .86	26x13	inch..... 1.10
21x11	inch..... .88	27x13	inch..... 1.13
22x11	inch..... .90	28x13	inch..... 1.16
23x11	inch..... .92	29x13	inch..... 1.20
24x11	inch..... .94	30x13	inch..... 1.23
25x11	inch..... .97	32x13	inch..... 1.27
26x11	inch..... .99	34x13	inch..... 1.33
27x11	inch..... 1.01	36x13	inch..... 1.44
28x11	inch..... 1.03	22x15	inch..... 1.07
29x11	inch..... 1.06	23x15	inch..... 1.10
30x11	inch..... 1.09	24x15	inch..... 1.14
31x11	inch..... 1.11	25x15	inch..... 1.18
32x11	inch..... 1.13	26x15	inch..... 1.20
33x11	inch..... 1.15	27x15	inch..... 1.25
34x11	inch..... 1.18	28x15	inch..... 1.28
35x11	inch..... 1.20	29x15	inch..... 1.30
36x11	inch..... 1.23	30x15	inch..... 1.33
38x11	inch..... 1.30	32x15	inch..... 1.40
40x11	inch..... 1.36	34x15	inch..... 1.45
22x13	inch..... .98	36x15	inch..... 1.50
23x13	inch..... 1.00		

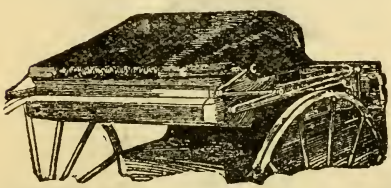
SURREY DASHES.



Sizes.	Net price each.	Sizes.	Net price each.
25x16	inch.....$1.40	29x16	inch.....$1.55
26x16	inch..... 1.44	30x16	inch..... 1.60
27x16	inch..... 1.48	32x16	inch..... 1.66
28x16	inch..... 1.52		

Note—These Dashes are No. 1. Not Seconds.

ADJUSTABLE DUST HOOD.



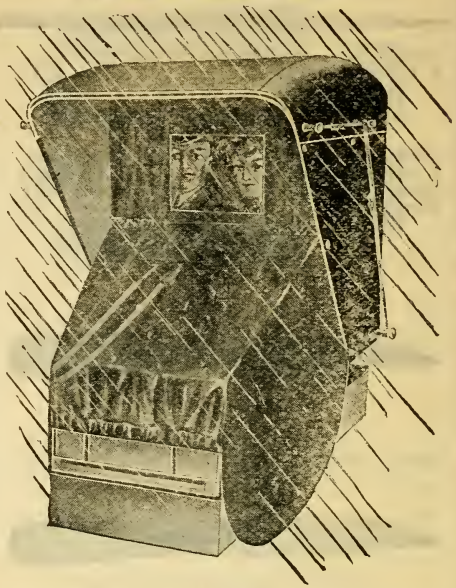
To Keep Mud and Dust Out of Top.

Sizes in stock. Net price each.

20-oz. Rubber, Adjustable.....$1.00

Saves Top linings at a small cost.

WARNER STORM PROTECTOR.



Combination storm apron and storm curtain. Adjustable, fastened by hooks to dash and bow. Being fastened inside top it is impossible for rain to leak in. Look-out light is brought close to occupants inside top, thus protected from rain or snow.

Cut above shows storm front in actual use. Makes a closed carriage.

After the storm is over, upper part may be lowered and rolled out of way, making a fine storm apron.

The front is very well made out of good materials and is a ready seller.

It can be put on and taken off while sitting in the buggy, and in quicker time than any other device for this purpose.

Sizes. Net price each.

No. 1. 24 oz. Rubber.....$2.00

No. 3. 24 oz., Melodeon Cloth..... 2.40

The above will fit the ordinary size top buggy.

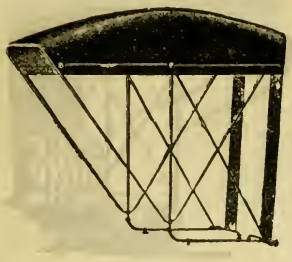
RUBBER MATTING.

Net price per lineal foot, 36 inches wide, 3-32 inch thick..... $0.25

For floors, hallways, aisles, steps, stairs, floors of carriages, etc. Will outwear all other floor coverings and is easily cleaned. Deadens noise, prevents slipping, soft and yielding to the step, is neat and ornamental.

BUGGY TOPS.

Shipped from factory.



REGULAR THREE BOW TOP.

The following tops have steel sockets, three or four-bowed. Metal loops in back stays. Corded front and black valance. Wrought iron adjustable rail and joints, nicely japanned. Unlined back curtain. Head lining corded.

DRILL TOP.

No. 35. This top is made of leather finished enamel drill throughout. It is lined with cotton cloth. Back and side curtains are color-back drill.

Net price each

Cotton $6.00

20-oz. RUBBER TOPS.

No. 37. Is made of 20-oz. rubber, of good quality, and is lined with either Union or cotton cloth. Side curtains and back curtain are color-back 20-oz. rubber.

Net price each

Cotton $6.50
Union 7.00

22-oz. RUBBER TOP.

No. 41. Twenty-two oz. rubber is used in this top throughout. Top is lined with Union cloth throughout, except side and back curtains, which are color-back rubber.....$7.25

26-oz. RUBBER TOPS.

No. 43. Only the best 26-oz. rubber is used in the construction of this top. Wool and Union cloth is used for lining. Side and back curtains are color-back rubber. Will outwear a leather quarter top.

Union Lined $7.75
No. 45 Wool 8.25

SPLIT LEATHER QUARTER TOP.

No. 55. The side quarters and back stays of this top are made of No. 1 split leather. The roof, side and back curtains are made of 20-oz. rubber. Curtains not lined. Top lined with Union cloth $8.50

M. B. LEATHER QUARTER TOP.

No. 61. Made of machine buffed leather in the side quarters and back stays; 20 oz. rubber roof and curtains. Back curtain lined. Top lined with Union cloth.....$10.25

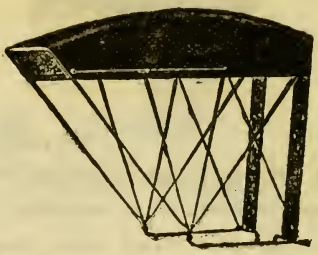
Tops Without Rail 25c Less.

TOPS ARE MADE TO ORDER.

Directions for Measurements, Page 125.

BUGGY TOPS.

Shipped from factory.



REGULAR FOUR BOW TOP.

FULL SPLIT LEATHER TOP.

No. 59. This top is made of No. 1 split leather throughout, except side curtains, which are color-back rubber. Lined only with wool cloth. Net price, each.....$12.50

The following are regular custom made tops. Lined throughout with 8-oz. all wool lining, excepting the side curtains, which are made of color-back rubber; steel bow-sockets three or four bow; adjustable wrought iron rail and joints; adjustable patent fasteners in back stays; back stays padded with wadding, and lining blinds stitched; dust lining in side quarters; hand stitched front and back valance.

These tops we guarantee to be first-class in every respect.

No. 3. This top is made of 24-oz. rubber drill throughout, and lined with 8-oz. wool cloth $13.00

No. 4. This top is made of 30-oz. rubber duck throughout, and lined with 8-oz. wool cloth $13.75

No. 6. This is a split leather quarter top made of No. 1 split leather, with 30-oz. rubber duck roof; back curtains and side curtains lined with 8-oz. all wool cloth.....$14.75

No. 7. Is a full leather top, made of No. 1 split leather throughout, except the side curtains, which are made of 30-oz. rubber duck; top lined with all wool 8-oz. cloth.....$18.75

No. 8. A leather quarter top, made of No. 1 machine buffed leather; with 30-oz. rubber duck roof, back and side curtains; top lined with 10-oz. all wool cloth.....$17.50

No. 9. Is a full leather top, made of No. 1 machine buffed leather throughout, except side curtains, which are made of 30-oz. rubber duck; top lined with 10-oz. all wool cloth.....$25.50

(Continued Next Page.)

Tops Without Rail 30c Less.

TOPS ARE MADE TO ORDER.

Directions for Measurements, Page 125.

Price F. O. B. factory.

BUGGY TOPS.

Shipped from factory.

IMITATION LEATHER TOP.

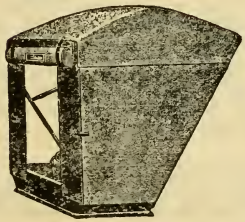
Sizes. Net price each.

No. 31. This top is made of imitation leather, is lined only with cotton lining, and made only in three-bow. This is a very cheap top, designed for cheap repair work. Side and back curtains are color-back. Wrought rail and joints $5.75

WHITE DUCK TOP.

No. 79. This top is made entirely of heavy No. 10 White Duck. Top is not lined; bows are painted. Made in three-bow only. Wrought rail and joints.....$7.50

SPECIAL ACME TOP.



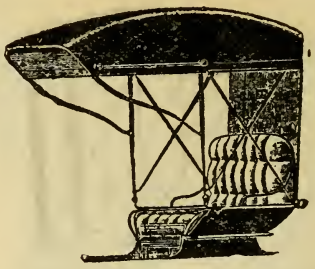
Detachable side curtains. Back curtain rolls up. Covered with White Sail Duck or Colored Blue or Brown and in sizes to fit seats from 40 to 48 inches out to out on Top.

Net price each $4.40

Send length seat, out to out on top.

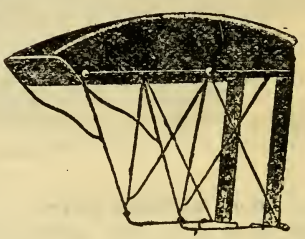
BUGGY TOPS.

Shipped from factory.



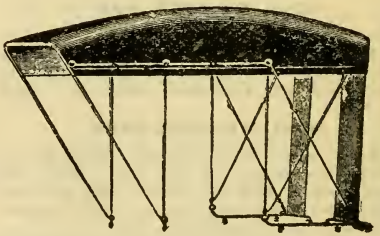
THREE-BOW HANDY.

25 Cents Extra For This Style Above Regular Prices.



FOUR-BOW HANDY.

25 Cents Extra for This Style Above Regular Prices.



EXTENSION TOPS.

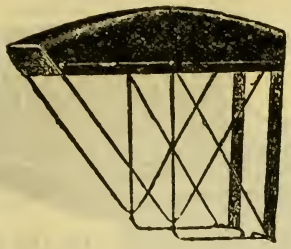
Sizes.	Net price each.
No. 10, Leather-finished drill lining.....	$ 9.50
No. 11, 20-oz. rubber, Union lining.....	12.00
No. 12, 24-oz. rubber, Union lining.....	12,25
No. 13, 30-oz. rubber, Union lining.....	12.75
No. 14, Split leather, Union lining.....	15.25
No. 15, Machine buffed leather quarter, Union lining	19.50

Tops Without Rail 30c Less.

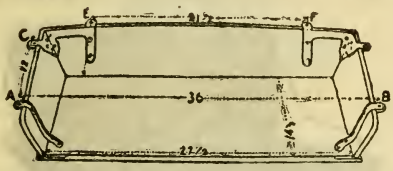
TOPS ARE MADE TO ORDER.

Directions for measurements, Page 125.
Prices F. O. B. factory.

BUGGY TOPS.



HOW TO MEASURE FOR BUGGY TOPS



All Tops Three-bow and Green Lining unless otherwise ordered.

For Top give exact measure from A to B.

For Full Back give exact measure from A to B and E to F.

For Cushion give exact length and width on bottom.

For Fall give exact width of body.

PHAETON.

Give distance across goose-neck where bows are attached.

Give distance from center of goose-necks to bottom of seat.

Give distance from goose-neck to back prop iron.

Give width of back panel.

EXTENSION TOP.

For Spring Wagons give width of seat, distance from front of front seat to front of back seat. If ironed, give distance between goose-necks of front and back seat. Give difference in height, if any.

For Surrey, give the same dimensions as for Phaetons, also distance from goose-neck on rear seat to goose-neck on front seat, from front goose-neck to front of seat.

TOPS WITHOUT RAIL.

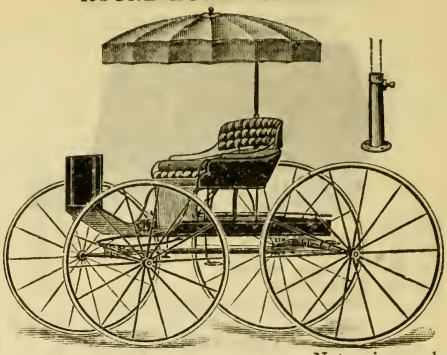
Give distance across goose-necks.

Give width of rail at back corners.

Give distance from goose-neck to prop iron where joint is attached.

(Tops requiring Bows over 42 inches wide, $1.00 extra.)

ROUND BUGGY UMBRELLA.

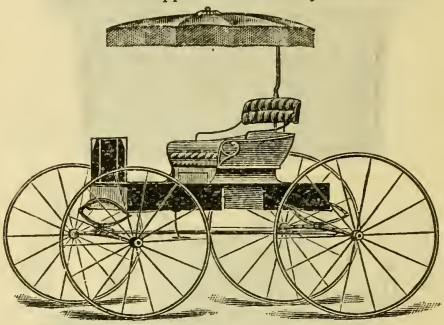


Net price each.

No. 1. Round, with Fringe and Standard. $4.50
No. 3. Round, with Fringe and Standard. 3.75
No. 1—Colors Tan, Blue, Brown and Green.
No. 3—Colors Tan only.

CANOPY.

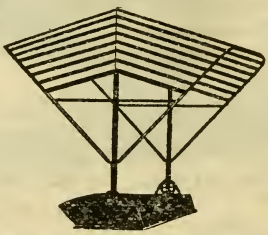
Shipped from factory.



Cover, Lining, and Fringe, same as used on English Canopies. Covers, Specially Woven Duck, Light Color.

	Price.		Price.
44x48	$ 9.50	48x60	$12.25
48x48	9.50	48x64	12.25
48x54	10.80	48x72	13.50
54x54	10.80	54x76	13.50
60x60	12.25	54x80	14.50

THREE BOW WAGON SEAT TOPS.



With All Irons Ready to Attach to Seat.

Net price each.

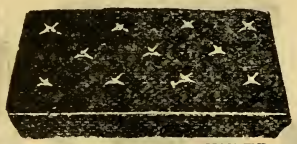
Covered with Blue and White Striped Duck $2.40

Note.—Regular Sizes, 34, 36, 38, 40, 42, 44 and 46 inch.

Send measure of Seat from Out to Out on Top.

COMMON CUSHIONS.

Shipped from factory.

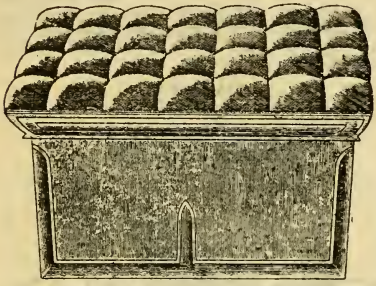


36 INCHES AND UNDER.

Sizes.	No Fall.	With Fall.
No. 20, Enamel Muslin	$0.55	$0.65
No. 21, Drill	.65	.80
No. 23, 22-ounce rubber	.75	.90
No. 24, White Duck	.90	1.05

Cushions over 36x14 Extra.

CUSHIONS.

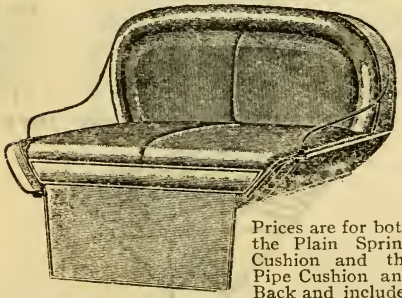


Net price each.

Sizes.	With Springs.	No Springs.
No. 72, 14-oz. All Wool Cloth	$3.25	$2.75
No. 71, 12-oz. Union Cloth	2.60	2.10
No. 75, Split Leather	3.25	2.80
No. 77, M. B. Leather	4.50	4.00
No. 70, Imitation Leather	1.75	1.35

Cushions over 28x15 inches, Extra.

PLAIN SPRING CUSHION AND BACK.



Prices are for both the Plain Spring Cushion and the Pipe Cushion and Back and includes both Cushion and Back. The Back attached to solid panel.

Net price per set.

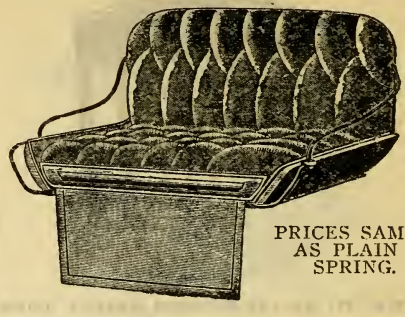
Sizes. Pipe.	Plain.	
No. 26,	No. 38, 16-oz. Cloth, Moss Top	$6.70
No. 27,	No. 39, 14-oz. Cloth, Moss Top	6.40
No. 28,	No. 40, 12-oz. Cloth, Moss Top	5.90
No. 29,	No. 41, Split Leather, Moss Top	8.10
No. 30,	No. 42, M. B. Leather, Moss Top	11.00

Cushions over 28 in. Long, Extra.

If the Wood Panel or Sidearm Rails are Not Wanted, Deduct 50c.

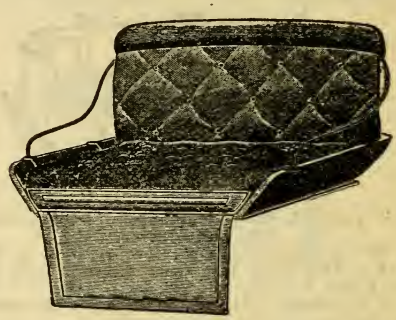
PIPE SPRING BACK AND CUSHIONS.

Shipped from factory.



PRICES SAME AS PLAIN SPRING.

PLAIN TUFTED BACK AND CUSHION.



28 INCHES AND UNDER.

Sizes.	Net price each.
No. 71½, 12-ounce Union Cloth, each Back or Cushion	$1.55
No. 70½, Imitation Leather, each Back or Cushion	1.00
No. 73½, Whip Cord, each Back or Cushion	1.55
No. 77½, M. B. Leather, each Back or Cushion	2.50
No. 75½, Split Leather, each Back or Cushion	2.00

Note.—If wanted with springs add 75 cents each.

Cushions over 28x15 inches, Extra.

FULL BACKS.

Net price each

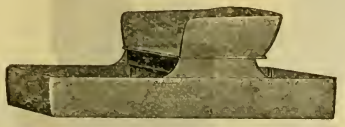
Sizes.	With Springs.	No Springs.
No. 82, 14-oz. All Wool Cloth	$3.15	$2.65
No. 81, 12-oz. Union Cloth	2.60	2.10
No. 86, Split Leather, Moss Top	3.00	2.50
No. 87, Leather, M. B.	4.00	3.50
No. 80, Imitation Leather	1.85	1.35

Backs over 32 in. Long, 10c per in. extra.

Note.—All Cushions are made to order.
Price F. O. B. Factory.

PIANO BOX BODIES.

Shipped from Factory.

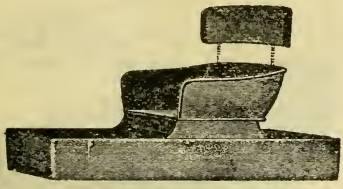


No. 1, PIANO BOX BODY.

No. 1, Piano Box Body, Straight Risers, Convex Seat, Regular Length 54 in...$4.25
No. 2, Piano Box Body, Concave Risers, Swell Sides, Convex Seat, High Arms, regular length 54 inches..... 4.50

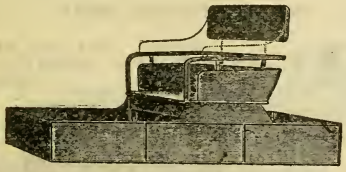
No. 3, PIANO BOX BODY.

Net price each.
No. 3, Piano Box Body, Swell Sides, Convex Body Panels, Concave Risers, O. G. Seat, regular length 54 inches.....$5.00



No. 5, PIANO BOX BODY.

Net price each.
No. 5, Piano Box Body, with Panel Seat, Solid Bent Connen, Loose Lazy Back, Length 56 inches $7.75



No. 6, PIANO BOX BODY.

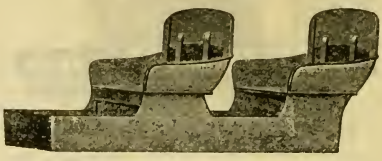
Net price each.
No. 6, Piano Box Body, Moulded Sides and Rear End, with Rail Seat, Length 54 inches $9.00

Note.—Seats Ironed for Shifting Rail. Regular length 54 inches, width 24 inches or under.

Note.—Bodies and Seats are shipped direct from the factory.

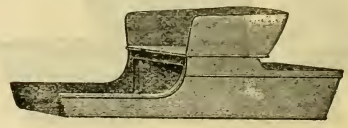
PIANO BOX BODIES.

Shipped from Factory.



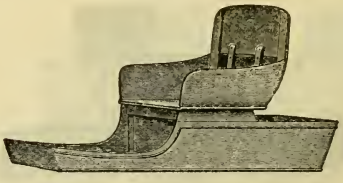
No. 7, PARK WAGON.

Net price each.
No. 7, Park Wagon, with two Phaeton Seats, Sizes of Body 25x66 inches....$9.00
No. 8, Same with Two Buggy Seats, Panel Backs Attached, Size of Body 25x66 in. 8.00



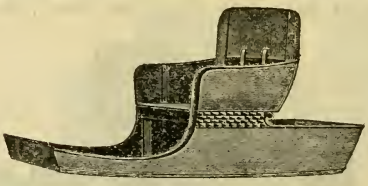
No. 15, CORNING BODY.

Net price each.
No. 15, Corning Body, Straight Riser High Arms, Two Lines Moulding, Convex Seat, Regular Size 23x50 inches...$6.00



No. 16, WHITECHAPEL BODY.

Net price each.
No. 16, Whitechapel Body, Phaeton Seat, Concave Risers, Two Lines Moulding, Regular Size 29x54 inches.....$6.75



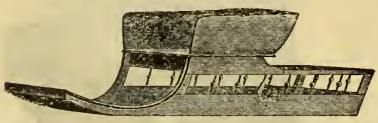
No. 17, CONCORD BODY.

Net price each.
No. 17, Concord Body, with Phaeton Seat, Body 29x54 inches $8.50
Same Style with Buggy Seat..... 7.50

Note.—Bodies and Seats are shipped direct from factory.

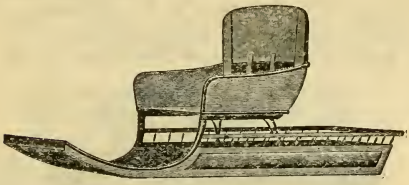
Price F. O. B. Factory.

ROAD WAGON BODY.
Shipped from Factory.



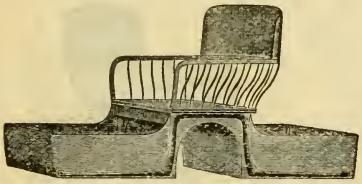
No. 18, SPINDLE ROAD WAGON.

Net price each.
No. 18, Spindle Road Wagon, with High Arm Seat, Size 24x55 inches.....$5.25



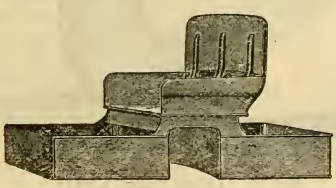
No. 19, SPINDLE ROAD WAGON.

Net price each.
No. 19, Spindle Road Wagon with Phaeton Seat, Size 23x59 inches.....$7.00
No. 20, Same with Spindle Seat..... 7.50
No. 21, Same with Buggy Seat..... 7.00



No. 25, CUTUNDER PIANO BOX BODY.

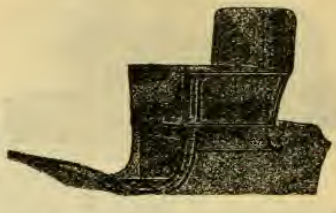
Net price each.
No. 25, Cutunder Piano Box Body, with Spindle Seat, Single or Double Bent Spindles, Metal or Wood Post Handles, Length, 56 inches $10.50
No. 26, Same, with Fancy Panel Seat.. 11.50



No. 27, CUTUNDER PIANO BOX BODY.

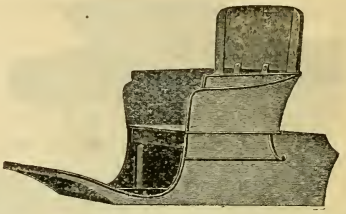
Net price each.
No. 27, Cutunder Piano Box Body, Moulded Edges, with O. G. Phaeton Seat, Length, 56 inches.....$11.00
No. 28, Same with Spindle Seat..... 10.50
Note.—Bodies and Seats are shipped direct from the factory.
Price F. O. B. Factory.

STANHOPE BODY.
Shipped from Factory.



No. 30, STRAIGHT SILL STANHOPE BODY.

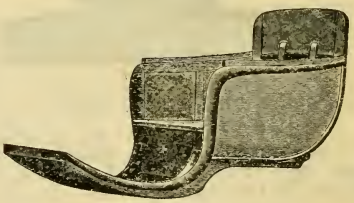
Net price each.
No. 30, Straight Sill Stanhope Body, with Phaeton Seat, Size 23x52 inches..$8.00



No. 31, STRAIGHT SILL STANHOPE BODY.

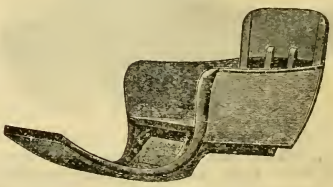
Net price each.
No. 31, Straight Sill Stanhope Body, with Panel Seat, Size 27x51 inches..$9.50

PHAETONS.



No. 46, PHAETON BODY.

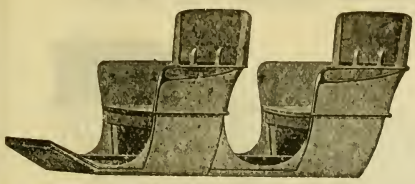
Net price each.
No. 46, Phaeton Body, Size 29½x7½ inches $11.00



No. 47, PHAETON BODY.

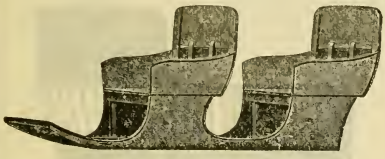
Net price each.
No. 47, Phaeton, Size 29½x47½ inches..$9.00
Note.—Bodies and Seats are shipped direct from the factory.
Price F. O. B. Factory.

SURREYS.
Shipped from Factory



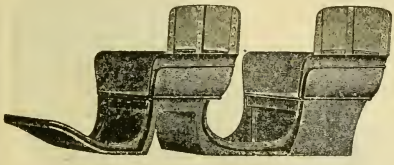
No. 56, STRAIGHT SILL SURREY BODY.

Net price each.
No. 56, Straight Sill Surrey Body, size 27x70 inches $12.50



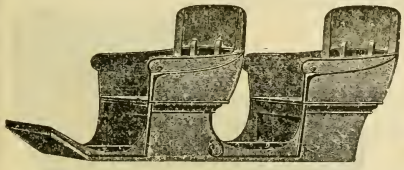
No. 57, STRAIGHT SILL SURREY BODY.

Net price each.
No. 57, Straight Sill Surrey Body, three-quarter size 25x27 inches $10.00



No. 59, STRAIGHT SILL SURREY BODY.

Net price each.
No. 59, Straight Sill Surrey Body, Seats Convex and Concave, size 21x70 ins..$13.50

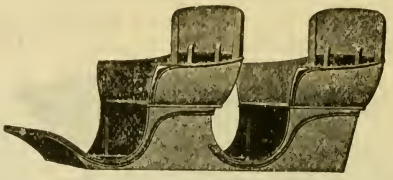


No. 60, STRAIGHT SILL SURREY BODY.

Net price each.
No. 60, Straight Sill Surrey Body, size 27x70 inches $13.50
Note.—Bodies and Seats are shipped from factory.

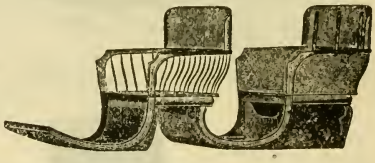
Price F. O. B. Factory.

SURREYS.
Shipped from Factory.



No. 61, STRAIGHT SILL SURREY BODY.

Net price each.
No. 61, Straight Sill Surrey Body, size 27x70 inches $13.75

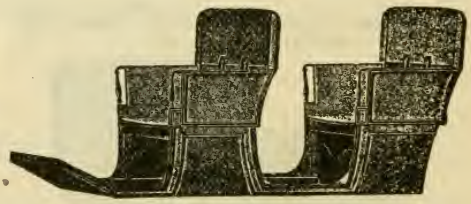


No. 76, CUTUNDER SURREY BODY.

Net price each.
No. 76, Cutunder Surrey Body, three-quarter size 25x67 inches $15.50
With Both Panel Seats..... 15.00

No. 166, SURREY.

Net price each.
No. 166, Surrey Cutunder, Both Seats Spindle with Metal Handle.....$16.50



No. 168, SURREY.

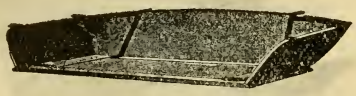
Net price each.
No. 168, Surrey, Straight Sill, Panel Seats with Metal Handles.....$12.50
Note.—Bodies and Seats are shipped direct from the factory.

Price F. O. B. Factory.

SEATS.

Shipped from Factory.

Net price each
Buggy Seats Not Ironed $1.3

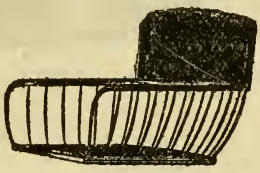


No. X, BUGGY SEATS.

Net price each.
No. X Seat, Ironed for Shifting Rails....$1.70

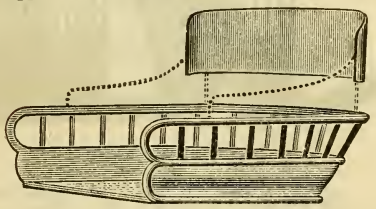
No. XX, BUGGY SEATS.

Net price each.
No. XX Seat, Ironed for Shifting Rails with Handles $1.75



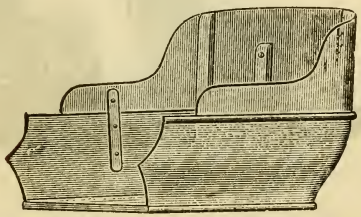
No. 1, BENT SPINDLE SEATS.

Net price each.
No. 1 Seat, with Metal Post Handles, for Buggies or Surreys $3.50



No. 45, BUGGY SEAT.

Net price each.
Semi-Stick Band Seat with Plain Band..$4.50
Add for Surrey, Standard size..... .75

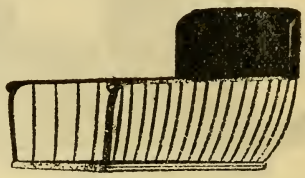


No. 28-O. G., AUTO SEAT.

Net price each.
Buggy Size $4.75
Surrey Size 5.50
Note.—Bodies and Seats are shipped from the factory.

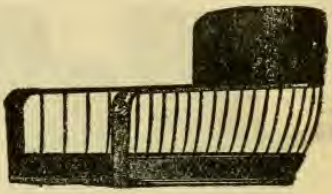
SEATS.

Shipped from Factory.



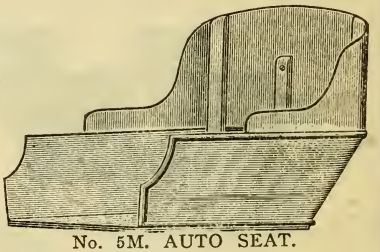
No. 2, BENT SPINDLE SEAT.

Net price each
No. 2 Seat, Metal Post Braces Curved Wood Posts, for Buggies or Surreys....$4.0



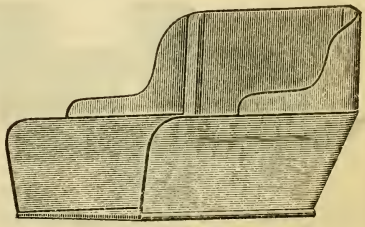
No. 3, BAND SPINDLE SEAT.

Net price eacl
No. 3 Seat, for Buggies or Surreys.....$4.5



No. 5M. AUTO SEAT.

Net price eacl
Buggy Size $5.5
Surrey Size 6.0



No. 1. AUTO SEAT.

Net price eacl
With Top and Lower Back each in one piece. Solid Bent Corners. Buggy size.$6.5
Note.—Bodies and Seats are shipped fror the factory.

GEARS IN THE WHITE.

Shipment from factory.

No. 0½—BUGGY GEAR.

Net price each $7.25

Axles—Double Collar $\frac{15}{16}$x6½ fan tail swedged, with point centre axle clips and beds cemented to axles.

Springs—3-leaf graded in pairs, with wood spring bars.

Fifth Wheel—Full bearing 12-inch with hickory reaches ironed full length.

Note—Will furnish 4-leaf springs, L. D. axles and wrought Bailey hoops, if desired, extra $1.50

No. 04—ELLIPTIC BUGGY GEAR.

Net price each $8.50

Axles—L. D. $\frac{15}{16}$x6½ fan tail swedged, with point centre axle clips and beds cemented to axles.

Springs—4-leaf graded in pairs, with wood spring bars.

Fifth Wheel—Wilcox 12-inch Derby, with bent hickory reaches, mortised in head block and ironed full length.

Note—Will furnish with wrought Bailey hoops if desired, extra ..... .70

No. 0110—ELLIPTIC BUGGY GEAR.

Net price each $9.25

Axles—L. D. $\frac{15}{16}$x6½ fan tail swedged, with point centre axle clips and beds cemented to axles.

Springs—4-leaf open head with wood spring bars.

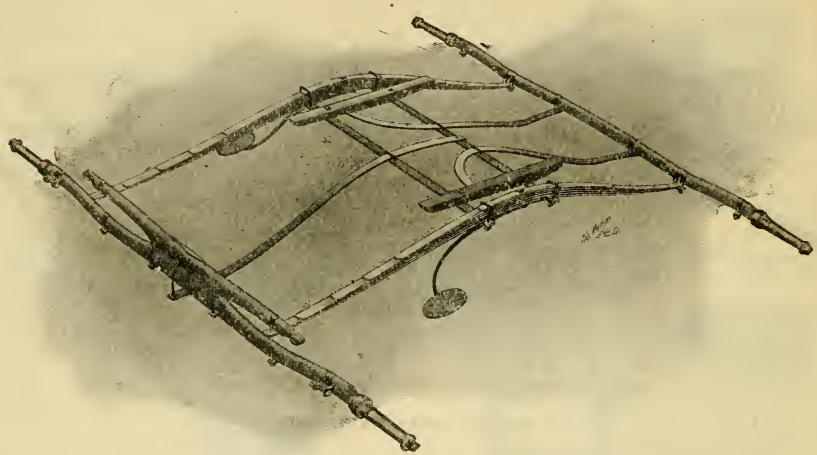
Fifth Wheel—Wilcox 12-inch Brewster slot with bent hickory reaches, mortised in head block and ironed full length.

Note—Will furnish with wrought Bailey hoops if desired, extra ..... .70

All Gears are shipped direct from the factory.
Prices F. O. B. Factory.

GEARS IN THE WHITE.

Shipment from factory.



No. 05—BON TON GEAR.

Net price each $9.25

Axles—Double Collar $\frac{15}{16}$x6½ fan tail, swedged with point centre axle clips and beds cemented to axles.

Springs—Genuine Bon Ton, which is recognized as being the most satisfactory side spring made.

Note—Will take bodies from 24x54 to 25x56. Furnished with L. D. axles if desired, extra ..... .25

No. 056—SOUTHERN SIDE SPRING GEAR.

Net price each $7.50

Axles—Double Collar $\frac{15}{16}$x6½ rear axle coached.

Springs—Side springs with rear braces from outside of springs to rear axle instead of inside.

Note—This gear has no reaches, will take body 24x54.

No. 045—DOUBLE REACH SIDE SPRING GEAR.

Net price each $8.00

Axles—Double Collar $\frac{15}{16}$x6½ fan tail and swedged.

Springs—Side springs hung on loose shackles, front and rear.

Fifth Wheel—Full bearing 12-inch with double reaches, iron full length.

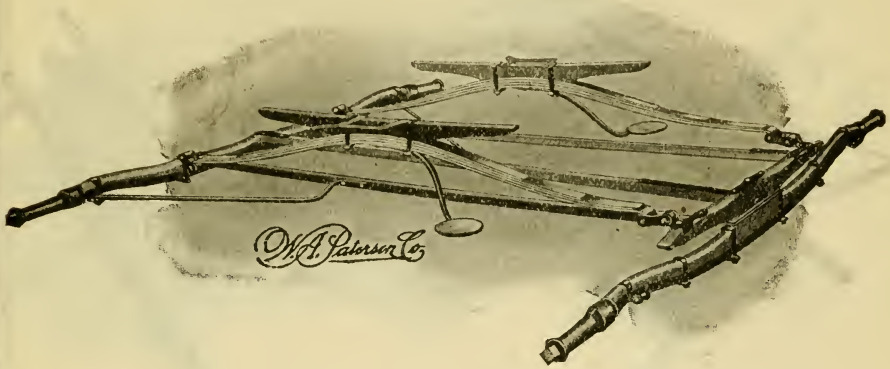
Note—Will take body 24x54.

All Gears are shipped direct from the factory.

Prices F. O. B. Factory.

GEARS IN THE WHITE.

Shipment from factory.



No. 057—CONCORD GEAR.

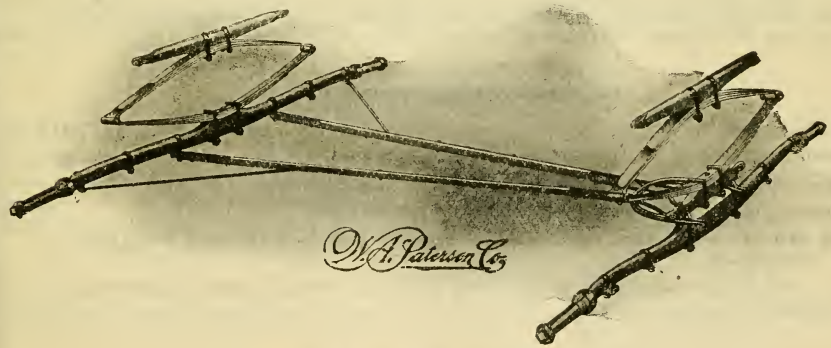
Net price each $8.75

Axles—Double Collar $\frac{15}{16}$x6½ fan tail swedged, with beds cemented to axles.

Springs—1⅜ inches 4-leaf, 52½ inches long.

Fifth Wheel—Face plate or 12 inch circle.

Note—Will furnish with L. D. axles and equalizers if desired, extra..... 1.00



No. 0291—SURREY GEAR.

Net price each $10.30

Axles—Double Collar, 1$\frac{1}{16}$x1⅛ fan tail and swedged, with point centre axle clips.

Springs—1⅜x4 and 5-leaf.

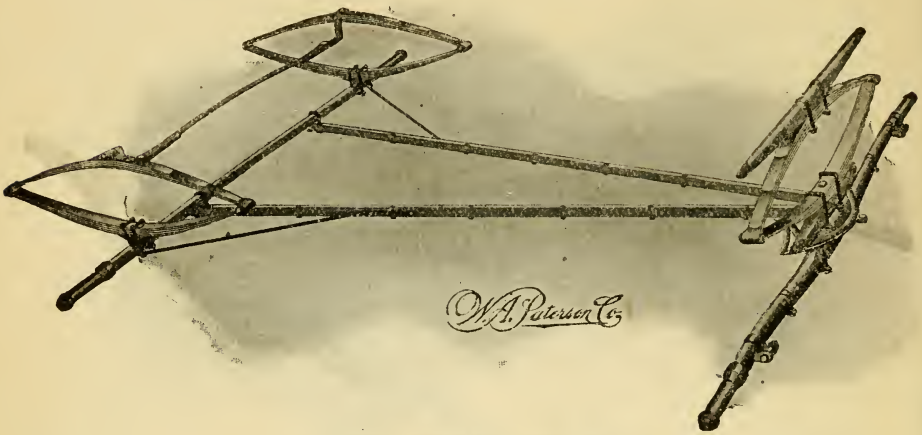
Fifth Wheel—Full bearing 12 inch, with reaches ironed full length.

Note—Will furnish with steel bar in front and Bailey loop rear, also L. D. axles if desired, extra 1.50

Prices F. O. B. Factory.

GEARS IN THE WHITE.

Shipped from factory.



No. 0330—THREE SPRING GEAR.

Net price each $9.75

Capacity—800 lbs.

Axles—Double Collar $1\frac{1}{16}$x6½ in.

Springs—1⅜ in., with carrying capacity of 800 lbs.

Fifth Wheel—Short turn, with double reaches mortised in head block and well ironed.

Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front spring if desired, extra 1.50

No. 0340—THREE SPRING GEAR.

Net price each $11.50

Capacity—1200 lbs.

Axles—Double Collar, 1⅛x6½ in.

Springs—1⅜ in., with carrying capacity of 1,200 lbs.

Fifth Wheel—Short turn, with double reaches mortised in head block and well ironed.

Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front spring if desired, extra 1.50

No. 0212½—THREE SPRING GEAR.

Net price each $16.25

Capacity—1,500 lbs.

Axles—Double Collar, 1¼x6½ in.

Springs—1½ in., with carrying capacity of 1,500 lbs.

Fifth Wheel—Heavy short turn, with double reaches mortised in head block and heavily ironed.

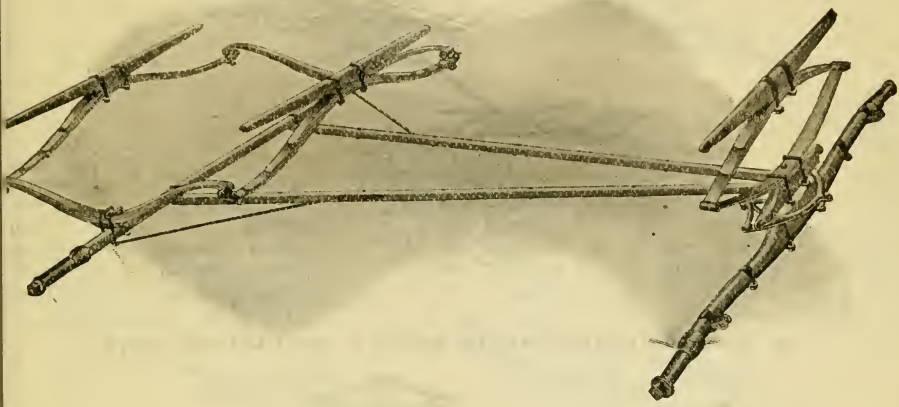
Note—Furnished regular for body 34 in. by 108 in. Will furnish triple front spring if desired, extra 1.50

All Gears are shipped direct from the factory.

Prices F. O. B. Factory.

GEARS IN THE WHITE.

Shipment from factory.



No. 0335—HALF-PLATFORM GEAR.

Net price each $11.20
Capacity—800 lbs.
Axles—Double Collar, $1\frac{1}{16}$x6½ in.
Springs—1⅜ in., with carrying capacity of 800 lbs.
Fifth Wheel—Short turn, with double reaches mortised in head block and well ironed.
Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front spring if desired, extra 1.50

No. 0345—HALF-PLATFORM GEAR.

Net price each $13.45
Capacity—1,200 lbs.
Axles—Double Collar, 1⅜x6½ in.
Springs—1⅜ in., with carrying capacity of 1,200 lbs.
Fifth Wheel—Short turn, with double reaches mortised in head block and well ironed.

Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front spring if desired, extra 1.50

No. 0212—HALF-PLATFORM GEAR.

Net price each $17.15
Capacity—1,500 lbs.
Axles—Double Collar, 1¼x6½ in.
Springs—1½ in., with carrying capacity of 1,500 lbs.
Fifth Wheel—Heavy short turn, with double reaches mortised in head block and heavily ironed.

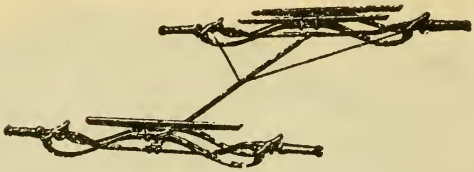
Note—Furnished regularly for body 38 in. by 108 in. Will furnish triple front spring if desired, extra 1.50

All Gears are shipped direct from the factory.

Prices F. O. B. Factory.

No. 24—IMPROVED SINGER DUPLEX GEAR.

Shipped from factory.

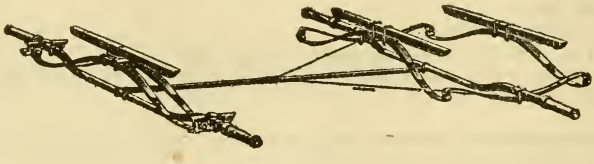


No.	Axle.	Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x42x3 and 4	800 lbs.	$ 9.22
2	1⅛x7 in.	1¼x42x4 and 5	1,000 lbs.	9.90
3	1¼x7 in.	1½x42x4 and 5	1,200 to 1,500 lbs.	11.83
4	1⅜x7½ in.	1½x42x5 and 6	1,700 to 1,800 lbs.	14.85
5	1½x8 in.	1¾x40x5 and 6	2,200 to 2,500 lbs.	18.70

No. 25—COMBINATION SINGER DUPLEX AND ELLIPTIC GEAR.

No.	Axle.	Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x42x3	1¼x36x4 Light.	800 lbs.	$10.20
2	1⅛x7 in.	1¼x42x4	1¼x36x4 Heavy.	1,000 lbs.	11.05
3	1¼x7 in.	1½x42x4	1½x36x4 Heavy.	1,500 lbs.	13.31
4	1⅜x7½ in.	1½x42x5	1½x36x5 Heavy.	1,800 lbs.	16.42
5	1½x8 in.	1¾x40x5	1½x36x5 Heavy.	2,200 to 2,500 lbs.	19.26

No. 26—COMBINATION SINGER DUPLEX AND PLATFORM GEAR.



No.	Axle.	Front Spring.	Side Spring.	Cross Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x3x42	1½x4x36 Light.	1½x5x43	800 lbs.	$12.75
2	1⅛x7 in.	1¼x4x42	1¼x4x36 Heavy.	1½x5x43	1,000 lbs.	13.25
3	1¼x7 in.	1½x4x42	1½x4x36 Heavy.	1½x6x43	1,500 lbs.	15.25
4	1⅜x7½ in.	1½x5x42	1½x5x36 Heavy.	1½x7x43	1,800 lbs.	18.50
5	1½x8 in.	1¾x5x40	1¾x5x36 Heavy.	1¾x7x43	2,000 to 2,500 lbs.	22.25

Note.—When ordering gears please give track and length and width of body, that there may be no mistakes in filling orders.

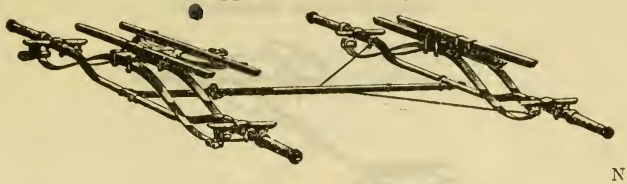
SPRINGS FOR DUPLEX GEARS.

Sizes.	Net price each.	Sizes.	Net price each.
1¼x3 leaf x42 in.	$1.10	1½x4 leaf x42 in.	$1.35
1¼x4 leaf x42 in.	1.30	1½x5 leaf x42 in.	1.60
1¼x5 leaf x42 in.	1.45	1½x6 leaf x42 in.	1.85

All gears are shipped direct from the factory.

No. 27—FITCH IMPROVED SHORT-TURN DUPLEX GEAR.

Shipped from factory.



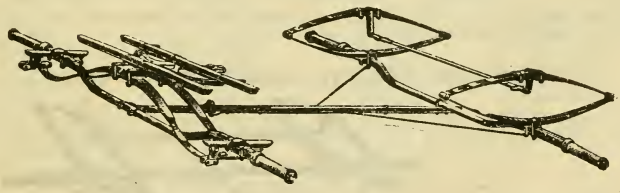
No.	Axle.	Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x42x3 and 4	800 lbs.	$10.15
2	1⅛x7 in.	1¼x42x4 and 5	1,000 lbs.	11.00
3	1¼x7 in.	1½x42x4 and 5	1,200 to 1,500 lbs.	13.75
4	1⅜x7½ in.	1½x42x5 and 6	1,700 to 1,800 lbs.	17.05
5	1½x8 in.	1¾x40x5 and 6	2,000 to 2,500 lbs.	20.90

The main object in short-turn gears is that you can use a wider body and turn short. The bearing rests exactly over the center of the front and back axle, and the body fastens securely to the gear. The body does not have any sliding motion, either front or back, where there would be any chance for it to rattle or make a noise. In one-joint-reach we use a cone-shaped coupling, where it can be tightened, taking up all wear and making it noiseless.

No. 29—THE FITCH IMPROVED COMBINATION SHORT-TURN DUPLEX AND PLATFORM GEAR.

No.	Axle.	Front Spring.	Side Spring.	Cross Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x3x42	1¼x4x36	1½x5x43	800 lbs.	$13.00
2	1⅛x7 in.	1¼x4x42	1¼x4x36	1½x5x43	1,000 lbs.	13.85
3	1¼x7 in.	1½x4x42	1½x4x36	1½x6x43	1,500 lbs.	16.40
4	1⅜x7½ in.	1½x5x42	1½x5x36	1½x7x43	1,800 lbs.	19.25
5	1½x8 in.	1¾x5x40	1¾x5x36	1¾x7x43	2,200 to 2,500	23.80

No. 28—FITCH IMPROVED COMBINATION SHORT-TURN DUPLEX AND ELLIPTIC GEAR.



No.	Axle.	Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1¼x42x3	1¼x36x4	800 lbs.	$11.30
2	1⅛x7 in.	1¼x42x4	1¼x36x4	1,000 lbs.	12.05
3	1¼x7 in.	1½x42x4	1½x36x4	1,200 to 1,500 lbs.	15.30
4	1⅜x7½ in.	1½x42x5	1½x36x5	1,800 to 2,000 lbs	18.10
5	1½x8 in.	1¾x40x5	1½x36x6	2,200 to 2,500 lbs.	22.10

No. 32—THREE SPRING GEAR REGULAR.

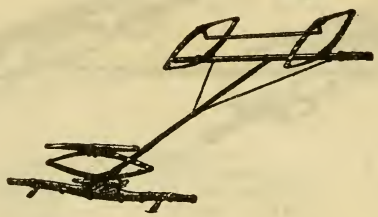
No.	Axle.	Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1½x4x36 Light.	1¼x4x36 Light.	800 lbs.	$12.25
2	1⅛x7 in.	1½x4x36 Heavy.	1¼x4x36 Heavy.	1,000 lbs.	13.20
3	1¼x7 in.	1½x5x36 Heavy.	1½x4x36 Heavy.	1,500 lbs.	15.30
4	1⅜x7½ in.	1½x6x36 Heavy.	1½x5x36 Heavy.	1,800 lbs.	18.10

We make these gears same as shown in cut for body loops in front and hang between hind springs or for body to sit on top of springs, or for front wheels to turn under body. When wheels are to turn under body the gear is made for wheels one foot difference in height, but otherwise all for 4 in. difference in height of wheels.

All gears are shipped direct from the factory.

No. 33—THREE SPRING SHORT-TURN GEAR.

Shipped from factory



No.	Axle.	Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory
1	1 x6½ in.	1½x4x36	1¼x4x36	800 lbs.	$12.50
2	1⅛x7 in.	1½x4x36	1¼x4x36	1,000 lbs.	13.50
3	1¼x7 in.	1½x5x36	1½x4x36	1,500 lbs.	15.75
4	1⅜x7½ in.	1½x6x36	1½x5x36	1,800 lbs.	18.50

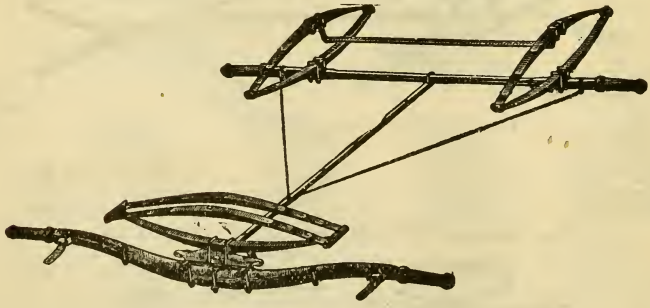
On this gear we use our Common Sense Short-Turn 5th Wheel, with the king bolt 5 in. back of center of axle, and is a good substantial short-turn 5th wheel. This gear is furnished for body to be hung on loop in front or to be set up on top of springs.

No. 42—COMBINATION SHORT-TURN END SPRING AND PLATFORM GEAR.

No.	Axle.	Front Spring.	Side Spring.	Cross Spring.	Capacity	Net price each f. o. b. factory.
1	1 x6½ in.	1½x4x36	1¼x4x36	1½x5x43	800 lbs.	$14.50
2	1⅛x7 in.	1½x4x36	1¼x4x36	1½x5x43	1,000 lbs.	15.55
4	1¼x7 in.	1½x5x36	1½x4x36	1½x6x43	1,500 lbs.	17.00
3	1⅜x7½ in.	1½x6x36	1½x5x36	1½x7x43	1,800 lbs.	20.25

When ordering gears of this style please state whether the body is to be hung on loops in front or to set on top of front spring bar.

No. 38—DOUBLE ELLIPTIC THREE SPRING GEAR.



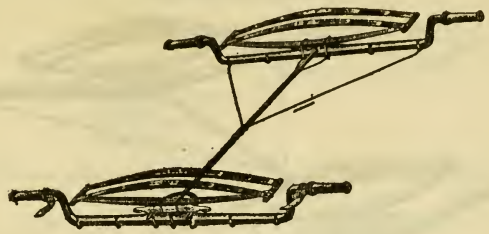
No.	Axle.	Top Front Spring.	Bottom Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1⅜x3	1¾x5x36	1¼x4x36	800 lbs.	$13.30
2	1⅛x7 in.	1½x4	1½x6	1½x4x36	1,000 lbs.	14.40
3	1¼x7 in.	1½x5	1½x7	1½x4x36	1,500 lbs.	17.00
4	1⅜x7½ in.	1¾x5	1¾x7	1½x5x36	1,800 lbs.	20.40

There is no use in our going on and setting forth the good qualities of this gear, as any mechanic can see at a glance that it is better adapted for grocers' wagons where a toe board is to be used on body and still hang the body low, as the front spring is much lower than a regular elliptic. Spring bars furnished on front springs.

All gears are shipped direct from the factory.

No. 40—DOUBLE ELLIPTIC END SPRING DROP AXLE GEAR.

Shipped from factory.



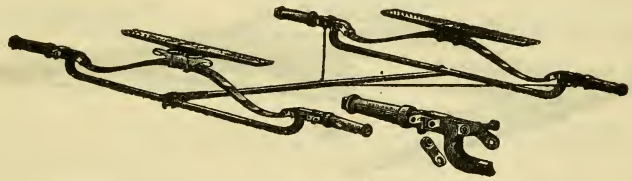
No.	Axle.	Top Front Springs.	Bottom Front Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1⅜x3	1⅜x5	800 lbs.	$13.00
2	1⅛x7 in.	1½x4	1½x6	1,000 lbs.	14.70
3	1¼x7 in.	1½x5	1½x7	1,500 lbs.	17.00

Hind Springs, same as front, but heavier steel.

This gear is adapted for any wagon where the load is wished to be as low to the ground as possible. It makes a fine gear for Grocers' Wagons, Laundry or Milk Wagons. In fact, it is a fine job for any purpose. We can build this gear with our Common Sense Short Turn 5th Wheel, and it will cost no more than with Derby 5th Wheel.

Spring Bars furnished on this gear.

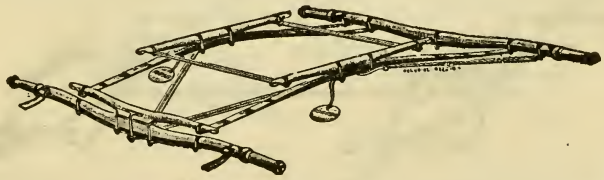
No. 30—F. A. BUSINESS GEAR.



No.	Axle.	Front Spring.	Hind Spring.	Capacity.	Net price each f. o. b. factory
½	⅞x6½ in.	1¼x4x39	1¼x5x39	500 lbs.	$ 8.00
1	1 x6½ in.	1½x4x39	1½x5x39	800 lbs.	8.75
2	1⅛x7 in.	1½x5x39	1½x6x39	1,000 lbs.	9.60
3	1¼x7 in.	1½x6x39	1½x7x39	1,500 lbs.	11.60

This gear is made with our new improved cone hangers and spring loops; also cone reach and axle coupling which is perfect in its construction and perfectly noiseless. We make this gear in but two tracks, 4 ft. 8 in. and 5 ft.

No. 21—THE MOYER "BANNER" GEAR.



Net price each f. o. b. factory.

No. 1, ⅞ in. Axle, for Buggy or Road Wagons, two passengers.....$10.40

We furnish the gear complete, as shown in cut, and of first-class material, using on all the Moyer patent steel lock 5th wheel. We put up these gears for only two widths of bodies, 22 and 25 in.

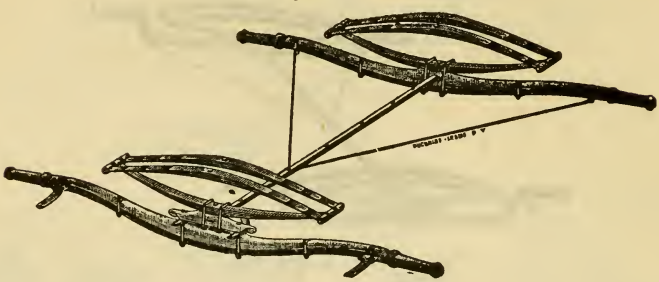
When ordering gears please give track and length and width of body, that there may be no mistakes in filling orders.

PLEASE TAKE NOTICE.

Note.—Owing to the number of different kinds of gears, different sizes, widths of body, etc., we are unable to carry these goods in stock, consequently make all shipments direct from the factory. All gears are shipped direct from the factory.

No. 39—DOUBLE ELLIPTIC END SPRING GEAR.

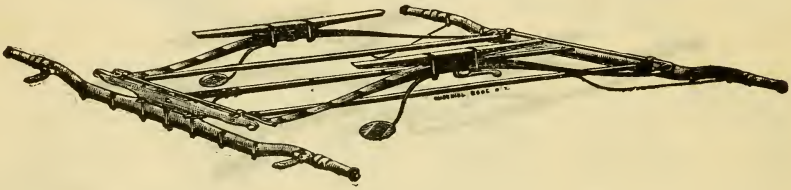
Shipped from factory.



No.	Axle.	Top Front Springs.	Bottom Front Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	1⅜x3	1⅜x5	800 lbs.	$13.25
2	1⅛x7 in.	1½x4	1½x6	1,000 lbs.	15.00
3	1¼x7 in.	1½x5	1½x7	1,500 lbs.	17.30

For ease and durability it has no equal. Suited for light pleasure surreys, traps or business wagon. It is made of first-class material and guaranteed to give satisfaction. We furnish spring bars on this gear.

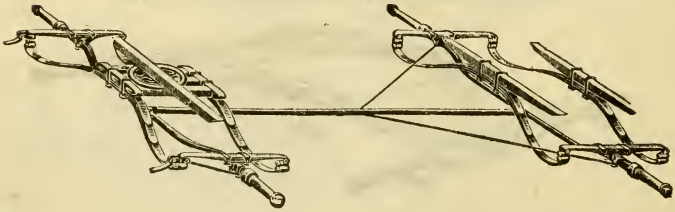
No. 22—CONCORD GEAR.



Net price each, f. o. b. factory.

No. 1 has ⅞ in. Axle.....$11.25
No. 2 has 1 in. Axle..... 11.90
No. 3 has 1⅛ in. Axle..... 12.60
No. 4 has 1¼ in. Axle..... 15.80

THE EXCELSIOR GEAR.



This gear is designed for grocery and heavy market wagons; is low down and rides easy.

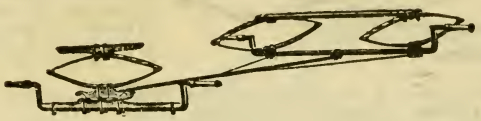
When ordering gears please give track and length and width of body, that there may be no mistake in filling orders. All track measured out to out if not otherwise ordered.

	Capacity.	Net price each.
No. 1 Gear has 1⅛x7 in. axles	1,000 lbs.	$13.50
No. 2 Gear has 1¼x7 in. axles	1,500 lbs.	15.60
No. 3 Gear has 1⅜x7½ in. axles	1,800 to 2,000 lbs.	18.50
No. 4 Gear has 1½x8 in. axles	2,200 to 2,400 lbs.	21.90

All gears made 4 ft. 8 in. track unless otherwise specified.

No. 36—THREE SPRING DROP AXLE GEAR.

Shipped from factory.



We make this gear as shown in cut with Cincinnati wrought 5th wheel and clip king bolt. We can furnish our new Common Sense Short-Turn 5th Wheel on the above gear when desired. We make this gear for four inches difference in height of wheels.

Net price each

No. 1 gear has 1x6½ axles, front springs 1½x4x36 light, hind springs 1¼x4x36 light. Capacity, 800 lbs. $13.43

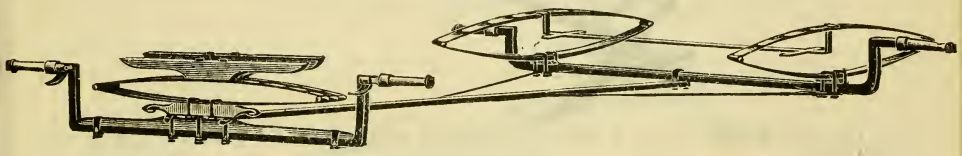
No. 2 gear has 1⅛x7 axles, front spring 1½x4x36 heavy, hind springs 1¼x4x36 heavy. Capacity, 1,000 lbs. 14.38

No. 3 gear has 1¼x7 axles, front spring 1½x5x36 heavy, hind springs 1½x4x36 heavy. Capacity, 1,500 lbs. 16.43

When ordering gears give track required, width and length of body to be used, so there may be no mistake in filling orders. We can only furnish these gears with half Pat. axles. We measure track out to out if not otherwise ordered.

All gears made 4 ft. 8 in. track unless otherwise specified.

No. 37—DOUBLE ELLIPTIC THREE SPRING DROP AXLE GEAR.



We make this gear as shown with Cincinnati wrought 5th wheel and clip king bolt, or with our new Common Sense Short-Turn 5th Wheel when desired. We make this gear for four inches difference in height of wheels.

Net price each

No. 1 has 1x6½ axles, front springs 1⅜x3, top half and lower half 1⅜x5, hind spring 1¼x4x36 heavy. Capacity, 800 pounds $14.00

No. 2 has 1⅛x7 axles, front springs 1½x4, top half and lower half 1½x6, hind spring 1¼x4x36 heavy. Capacity, 1,000 pounds 15.14

No. 3 has 1¼x7 axles, front spring 1½x4, top half and lower half 1½x6, hind springs 1½x4x36. Capacity, 1,500 pounds 17.57

When ordering gears give length and width of body and track required. We can only furnish these gears with half Pat. axles, and measure track out to out if not otherwise ordered.

All gears made 4 ft. 8 in. track if not otherwise specified.

No. 41—COMBINATION DOUBLE ELLIPTIC AND PLATFORM GEAR.

Net price each

No. 1 has 1x6½ axles, front spring 1⅜x3, top and lower half 1⅜x5 plate, hind side spring 1¼x4x36 light, cross springs 1½x5x43 light. Capacity, 800 pounds $14.73

No. 2 has 1⅛x7 axles, front spring 1½x4, top and lower half 1½x6 plate, hind side spring 1¼x4x36 heavy, cross springs 1½x5x43 heavy. Capacity, 1,000 pounds 15.86

No. 3 has 1¼x7 axles, front spring 1½x4, top and lower half 1½x6 plate, hind side spring 1½x4x36 heavy, cross springs 1½x6x43 heavy. Capacity, 1,500 pounds 17.85

No. 4 has 1⅜x7½ axles, front spring 1½x5, top and lower half 1½x7 plate, hind side spring 1½x5x36 heavy, cross springs 1½x7x43 heavy. Capacity, 1,800 pounds 20.40

When ordering gears please give track required; also length and width of body to be used on gear, so that there may be no mistake in filling orders. Track measured out to out if not otherwise ordered.

All gears made 4 ft. 8 in. track unless otherwise specified.

No. 43—ELLIPTIC AND HALF PLATFORM GEAR.

Shipped from factory.

We also furnish this gear with Flat Bar on Front Spring, allowing body to rest on top springs.

We also make this style gear with our Improved Double Elliptic Front, same as our No. 40 gear. Can furnish either Wrought or our New Common Sense Short-Turn 5th Wheel. Gear is made for 4 in. difference in height of wheels.

Net price each

No. 1 gear has 1x6½ axles, front springs 1½x4x36 light, hind springs, 1¼x4x38 light, cross springs 1½x5x43 light. Capacity, 800 pounds.....$13.03

No. 2 gear has 1⅛x7 axles, front springs 1½x4x36 heavy, hind springs 1¼x4x38 heavy, cross springs 1½x5x43 heavy. Capacity, 1,000 pounds..... 14.16

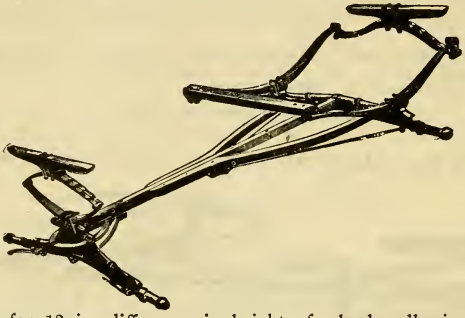
No. 3 gear has 1¼x7 axles, front springs 1½x5x36 heavy, hind springs 1½x4x38 heavy, cross springs, 1½x6x43 heavy. Capacity, 1,500 pounds..... 16.43

No. 4 gear has 1⅜x7½ axles, front springs 1½x6x36 heavy, hind springs 1½x5x38 heavy, cross springs 1½x7x43 heavy. Capacity, 1,800 pounds..... 18.70

Track measured out to out if not otherwise ordered.

All gears made 4 ft. 8 in. track if not otherwise specified.

No. 45—CONCORD EXPRESS ELLIPTIC AND HALF PLATFORM GEAR.



This gear is made for 12 in. difference in height of wheels, allowing front wheels to turn under body.

Net price each

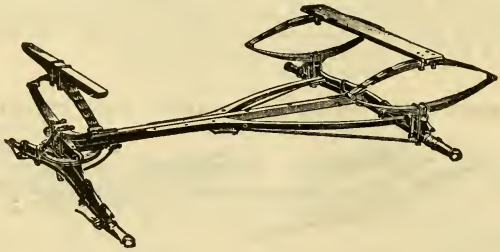
No. 0 gear has Concord axles, 1⅛x7 front springs 1½x5x36, hind springs 1½x4x38, cross springs 1½x5x40. Capacity, 1,000 pounds.....$26.00

No. 1 gear has Concord axles, 1¼x7 spindle, front springs 1½x6x36 ribbed, hind springs 1½x5x38, cross springs 1½x6x40. Capacity, 1,500 pounds..... 27.75

No. 2 gear has Concord axles, 1⅜x7½ spindle, front springs 1¾x6x36 ribbed, hind springs 1¾x6x38, cross springs 1¾x7x40. Capacity, 1,800 to 2,000 pounds..... 31.00

No. 3 gear has Concord axles, 1½x8 spindle, front springs 1¾x7x36 ribbed, hind springs 1¾x7x38, cross springs 1¾x8x40. Capacity 2,000 to 2,400 pounds..... 34.00

No. 44—THREE SPRING CONCORD EXPRESS GEAR.



This gear is made for 12 in. difference in height of wheels to allow front wheels to turn under body. Gear is made of best material and workmanship.

Net price each

No. 0 gear, axles Concord, 1⅛x7 spindle, regular springs, front springs 1½x5x36, rear springs 1½x4x34. Capacity, 1,000 pounds $24.20

No. 1 gear, axles Concord, 1¼x7 spindle, ribbed springs, front springs 1½x6x36, rear springs 1½x5x34. Capacity, 1,500 pounds..... 25.57

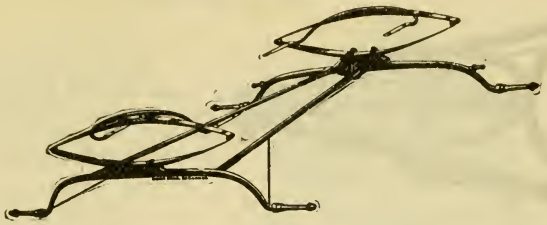
No. 2 gear, axles Concord, 1⅜x7½ spindle, ribbed springs, front springs 1¾x6x36, rear springs 1¾x5x34. Capacity, 1,800 to 2,000 pounds..... 28.60

No. 3 gear, axle Concord, 1½x8 spindle, ribbed springs, front spring 1¾x7x36, rear spring 1¾x6x34. Capacity, 2,200 to 2,400 pounds..... 30.80

We can furnish any of the above gears with half patent axles when desired. When ordering gears give length and width of body to be used. All gears are made 4 ft. 8 in. track, out to out, unless otherwise ordered. We make additional charge per foot for Concord gears when made for body longer than 9 feet.

No. 10—ROMAN BIKE GEAR.

Shipped from factory.



We make this Gear with round axles which have solid shaft lugs, or with swaged top and bottom axles, with Bradley Couplings, 5th wheel Twentieth Century, solid wrought iron, solid rear reach connections.

Net price each

No. 1 Gear, ⅞ Fitch Improved Self-Oiling Axle.....$21.80
Springs, open head, 1¼x4x36 full bright graded steel.

Net price each

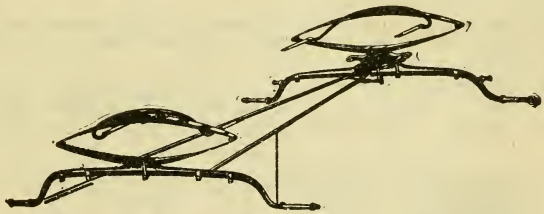
No. 2 Surrey Gear, 1x6½, Fitch Improved Self-Oiling Axle.....$25.30
Springs, open head, 1⅜x4x5x36, full bright graded steel.

We make the above gear for any length or width of body, but when ordering surrey gears give the distance between springs.

Track 4 ft. 2 in., 4 ft. 4 in., 4 ft. 6 in., O. to O.

This gear is finished fine irons and axles hand drawn filed, and first class in every respect. Made for two inches difference in height of wheels.

No. 11—FITCH IMPROVED BIKE GEAR.



This Gear is to meet the demand for first class work. It has Wilcox Anti-Rattler 5th Wheel, solid wrought perch plates. We furnish Bradley Couplings on the above gear when desired. We also furnish the above gear with our Fitch Radical Springs. Made for bodies from 18 in. to 25 in. wide, and 48 in. to 56 in. long. Track 4 ft. 2 in., 4 ft. 4 in., and 4 ft. 6 in., O. to O.

Net price each

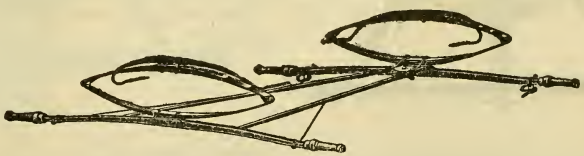
No. 1 Gear, 13-16x⅞x6 in., Fitch Improved Self-Oiling Axle.....$19.35
Springs, 1¼x4x36x6½, open head, full bright graded steel.

Net price each

No. 2 Surrey Gear, 1x6½, Fitch Improved Self-Oiling Axle.....$21.00
Springs, 1⅜x4x5x36x6½, open head, full bright graded steel.

When ordering buggy gears give length and width of body; when ordering surrey gears give distance between springs. Made for two inches difference in height of wheels.

No. 14—END SPRING NAKED AXLE GEAR.



EITHER CROWN OR SLIGHT DROP.

This Gear is to supply a demand for fine, light work; 5th wheel Twentieth Century, all wrought iron, Bradley Shaft Couplings.

Net price each

No. 1, ⅞x6½, Fitch Improved Self-Oiling Axle.....$18.75
Springs, open head, 1¼x4x36x6½, full bright graded steel.

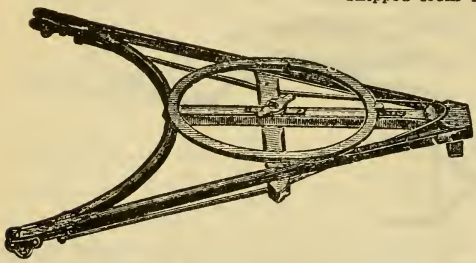
Net price each

No. 2 Surrey Gear, 1x6½, Fitch Improved Self-Oiling Axle.....$21.00
Springs, open head, 1⅜x4x5x36, full bright graded steel.

When ordering buggy gears give length and width of body; surrey gears give distance between springs. Track, 4 ft. 2 in., 4 ft. 4 in., 4 ft. 6 in., and 4 ft. 8 in., out to out.

SELLE'S PATENT TRUSSED PLATFORM GEARS

Shipped from factory



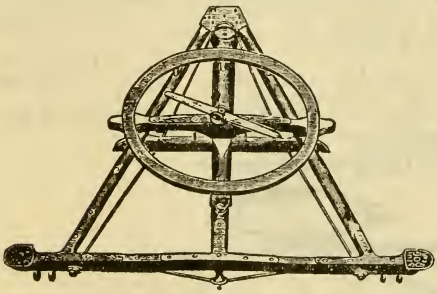
Gears Nos. 1 L to 4 H specially suited for light passenger and delivery wagons for drop pole and shafts only, and high front wheels to strike body in turning.

Nos. 1L to 4H

Low Circle Gear No.	Axles	Springs	Plain Circles	Front Platform only. No Springs or Axles	Gear, Springs and Axles, Clipped up with H. P. Axles	Gear, Springs and Axles, Clipped up with Concord	Top Gear and Spring Bars	Drop Pole & Eveners Ironed Complete	Shafts Ironed complete
1 L	1 1/16x7	1 1/4x4&5x38&40	5/16x1 1/8x20	$3 75	$20 00		$2 70	$7 90	$4 50
2 L	1 1/8x7	1 3/8x4&5x38&40	5/16x1 1/8x22	3 75	21 50	$22 75	3 15	8 15	4 50
3 L	1 1/8x7	1 1/2x4&5x38&40	5/16x1 1/4x22	3 75	21 75	23 00	3 40	8 20	4 50
3 M	1 1/4x7	1 1/2x5&6x40&42	5/16x1 1/4x24	4 20	24 60	26 55	3 60	8 45	5 10
3 H	1 3/8x7 1/2	1 1/2x6&7x40&42	3/8x1 1/4x24	4 60	29 50	31 75	4 05	8 75	5 65
4 M	1 3/8x7 1/2	1 3/4x5&6x40&42	3/8x1 1/2x24	4 60	30 60	32 85	4 05	8 75	5 65
4 H	1 1/2x8	1 3/4x6&7x40&42	3/8x1 1/2x26	5 25	35 60	37 80	4 50	9 00	6 20

Gears Nos. 5L to 7H specially suited for light passenger and delivery wagons for drop pole and shafts only. Circles raised to allow low front wheels to turn under body.

Raised Circle Gear No.	Axles	Springs	Plain Circles	Front Platform only. No Springs or Axles	Gear Springs and Axles, Clipped up with H. P. Axles	Gear Springs and Axles, Clipped up with Concord	Top Gear and Spring Bars	Drop Pole & Eveners Ironed Complete	Shafts Ironed complete
5 L	1 1/8x7	1 3/8x4&5x38&40	5/16x1 1/4x24	$4 85	$21 85	$23 65	$4 95	$8 15	$4 50
6 L	1 1/8x7	1 1/2x4&5x38&40	5/16x1 1/4x24	5 20	22 50	24 10	4 95	8 20	4 50
6 M	1 1/4x7	1 1/2x5&6x40&42	3/8x1 1/4x26	5 25	25 65	27 70	5 40	8 45	5 10
7 M	1 3/8x7 1/2	1 3/4x5&6x40&42	3/8x1 1/2x28	6 10	31 75	35 00	6 30	8 75	5 65
7 H	1 1/2x8	1 3/4x6&7x40&42	7/16x1 1/2x28	6 70	37 15	39 40	6 75	9 00	6 20



Gears Nos. 15 M to 19 H gears are suitable for tinners' stove, hardware and general light business wagons—for drop pole or shafts with circles raised to allow front wheels to turn under body.

For stiff pole attachment on these gears add $1.75.

Raised Circle Gear No.	Concord Axles	Springs, Oil Tempered, Plain or Ribbed	Plain Circles	Front Platform only. No Springs or Axles	Gear, Springs & Concord Axles Clipped Up	Top Gear and Spring Bar	Pole & Eveners Ironed Complete	Shafts Ironed Complete
15 M	1 1/8x7	1 3/8x4&5x40&42	5/16x1 1/4x26	$ 6 70	$25 65	$4 95	$8 20	$4 50
16 M	1 1/4x7	1 1/2x5&6x40&42	3/8x1 1/4x26	7 95	30 15	5 40	8 45	5 05
17 M	1 3/8x7 1/2	1 3/4x5&6x40&42	3/8x1 1/2x28	8 80	36 90	6 30	8 75	5 65
18 L	1 1/2x8	2 x6&7x40&42	3/8x1 1/2x28	10 10	44 80	7 00	9 00	6 15
18 M	1 5/8x8 1/2	2 x7&8x40&42	7/16x1 1/2x27	10 80	49 95	7 20	9 55	6 75
19 M	1 3/4x9	2 1/4x8&9x40&42	7/16x1 3/4x30	12 40	61 90	8 10	10 15	7 30

All gears on this page are shipped direct from factory at Akron, Ohio.

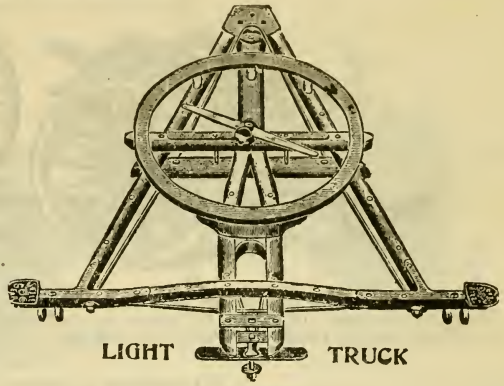
SELLE'S PATENT TRUSSED PLATFORM GEARS

Shipped from factory

Nos. 30 L to 34 H for light truck wagons stiff pole, and low front wheels to turn under body, suitable for heavy delivery, light truck and transfer wagons.

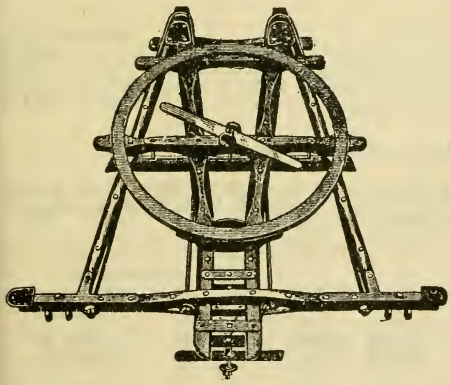
ORDER PLATFORM GEARS by number and letter, giving width of steel, length of side and cross springs.

In ordering platform gears clipped up, give full specifications as to width of steel, number of plates, length of side and cross springs, sizes of axles front and rear, length of spindle, width of track out to out, width of tire to be used, height of front and rear wheels, sizes of spokes (front and rear), width and depth of rims, thickness of tire, width and length of body and whether it shall be hung level or sloping to the rear.



Raised Circle Gear No.	Concord Axles	Springs, Oil Tempered, Plain or Ribbed	Plain Circles	Front Platform only. No Springs or Axles	Gear, Springs & Concord Axles Clipped Up	Top Gear and Spring Bar	Stiff Pole & Eveners Ironed Complete	Shafts Ironed Complete
31 M	1 3/8x7 1/2	1 3/4x 5& 6x40&42	3/8x1 1/2x28	$12 60	$37 20	$5 60	$7 76	$5 00
31 H	1 1/2x8	1 3/4x 6& 7x40&42	7/16x1 1/2x28	13 10	41 80	6 00	8 00	5 50
32 M	1 5/8x8 1/2	2 x 7& 8x40&42	1/2x1 1/2x28	14 05	48 80	6 40	8 50	6 00
32 H	1 3/4x9	2 x 8& 9x40&42	1/2x1 3/4x28	14 50	56 00	6 80	9 00	6 50
33 M	1 3/4x9	2 1/4x 8& 9x40&42	1/2x1 3/4x30	16 35	60 00	7 20	9 00	6 50
34 H	2 x10	2 1/2x10&11x40&42	9/16x2 x32	19 75	76 00	8 40	10 00	8 00

SELLE'S PATENT TRUSSED PLATFORM GIANT TRUCK GEAR



FOR MERCHANDISE TRUCKS, ETC.

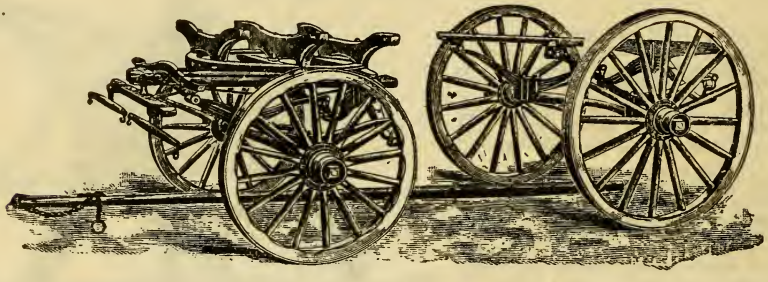
Nos. 40 L to 46 H, a serviceable gear for transfer trucks, ice, oil tank, sprinkling and beer rol wagons. We make ice, sprinkling and beer rol gears of selected white oak timber.

Raised Circle Gear No.	Concord Axles	Springs, Oil Tempered, Plain or Ribbed	Plain Circles	Front Platform only. No Springs or Axles	Gear, Springs & Concord Axles Clipped Up	Top Gear and Spring Bar	Stiff Pole & Eveners Ironed Complete	Shafts Ironed Complete
41 L	1 5/8x8 1/2	2 1/4x 7& 8x40&42	1/2x1 1/2x32	$22 00	$60 00	$6 80	$8 50	$6 00
42 L	1 3/4x9	2 1/2x 8& 9x40&42	7/16x1 3/4x32	24 00	69 60	7 60	9 00	6 50
42 H	2 x10	2 1/2x10&11x40&42	9/16x1 3/4x32	26 00	82 80	8 40	10 00	8 00
44 H	2 1/4x11	3 x12&14x40&42	5/8x2 x34	30 40	106 80	10 00	11 00	8 00

All gears on this page are shipped direct from factory at Akron, Ohio.

WAGON GEAR COMPLETE, READY FOR BODY

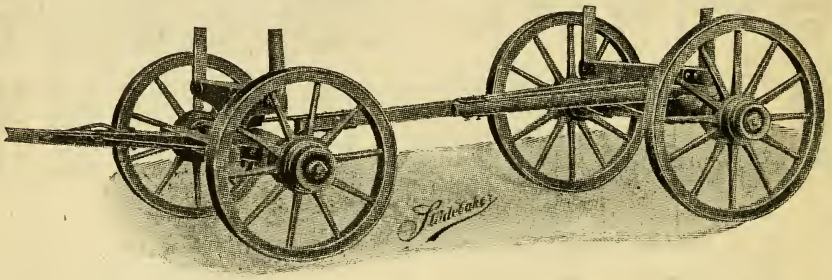
Shipped From Factory.



Can furnish with promptness, light and heavy Platform Gears as shown above complete ready to receive the body. In writing for prices, give full specifications, stating capacity and giving such description as will enable us to quote intelligently. We can save you money on this line.

FARMER'S HANDY TRUCK.

Shipped From Factory.



		Net price each.
No. 8228.	Free on board cars at Factory	$29.00
No. 8228.	Free on board cars at Corry, Pa.	32.00
No. 8226.	Free on board cars at Factory	25.00
No. 8226.	Free on board cars at Corry, Pa.	28.00

WIDE OR NARROW TRACK. CAST SKEINS ONLY.

Wide track, 5 feet; narrow track, 4 feet 6 inches, center to center of tires on the ground. Bolsters are 3 feet 6 inches on wide track; 3 feet 2 inches on narrow track, between standards. Price includes wood hub wheels and pole, no whiffletrees or neckyokes.

No.	Size of Cast Skein	Height of Wheels		Size of Tire	Approximate	
		Front	Hind		Weight	Capacity
8228	3¼x10 in.	30 in.	36 in.	4 x⅜ inches	680 lbs.	4000 lbs.
8226	3 x10 in.	30 in.	36 in.	3½x⅜ inches	560 lbs.	3000 lbs.

This truck is especially adapted to farm or orchard work, but can be readily utilized for transfer work by adding a suitable platform. The reach is long enough to couple out for a 16-foot rack or box. The bolsters are made with wrought iron sockets and removable wood standards.

We furnish regularly with wood hub wheels, 30 inches and 36 inches high, but can also furnish with wheels 30 inches high all around, or 36 inches high all around. We believe the wood hub wheels to be stronger and of longer life than the steel wheels, but will if desired furnish steel wheels, either 28 inches, 30 inches or 36 inches high at the same price.

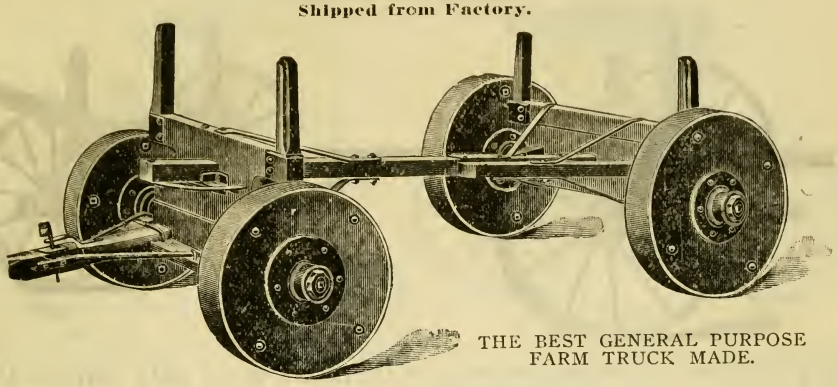
While this truck is built of good material and finished in a workmanlike manner, it must not be expected at the same price we sell it to stand up under the same hard usage that our regular wagons would. Neither does the same guarantee apply.

We will ship wood wheels unless otherwise specified.

No. 9—HANDY WAGON.

WOOD WHEELS, NAKED GEAR.

Shipped from Factory.



THE BEST GENERAL PURPOSE FARM TRUCK MADE.

This is our latest, and we believe it to be the best general purpose 2-horse farm truck made. It, in connection with our platform, combines all the advantages which are sought in a farm truck.

First. Broad tire, 6 inches. "From every point of view the 6-inch tires will be the most satisfactory. Four-inch tires work down into the ruts made by the narrow tires and bind."—Professor Waters of Missouri Experiment Station.

Second. Short Turn—The front wheels turn under the load, allowing the wagon to be turned in its own length.

Third. The Fifth Wheel.—All our short turn styles are made with a very strong reach and an especially designed fifth wheel and large iron circle around it. This is a very important point, because when a loaded wagon is coming around a short turn, the strain on the fifth wheel is great if the ground is rough or the load not well balanced, and to meet this we have kept strengthening and bracing our trucks until there is nothing like it on any other wagon.

Fourth. Broad, Low Platform.—The platform can be any length or width without interfering with the turning of the wagon.

Fifth. Your ordinary wagon box can be used on this wagon the same as on any common wagon.

Sixth. Easy Draft because of its broad tires and low hitch, giving the horses a lifting advantage when pulling up into the barn.

No. 9 HANDY WAGON.

Two-horse, short-turn style; wheels turn under load.

Standard Track—Narrow, 4 feet 8 inches; wide, 5 feet center to center of tires on ground. Bolsters, 38½ inches between stakes on narrow track; 42 inches on wide track.

Prices include pole and wrench only.

Catalog No.	Kind of Wheels	H't Front Wheels	H'ght Rear Wheels	Size of Tires, in.	Size of Skein, in.	Size of Axle, in.	T'p of Bol. fr'm Gr'nd	Approximate Weight	Approximate Capacity.	Net price each.
101	Wood	24	28	6x¼	3½x7	3x4½	26	750 lbs.	4,000 lbs.	$27.00
102	Wood	26	30	6x¼	3½x7	3x4½	28	800 lbs.	4,000 lbs.	28.00
103	Wood	28	32	6x¼	3½x7	3x4½	30	850 lbs.	4,000 lbs.	29.00
104	Steel	26	30	4x¾	3½x7	3x4½	28	625 lbs.	4,000 lbs.	27.50
105	Steel	26	30	5x⅜	3½x7	3x4½	28	650 lbs.	4,000 lbs.	29.00
106	Steel	28	32	4x⅜	3½x7	3x4½	30	650 lbs.	4,000 lbs.	28.00
107	Steel	28	32	5x⅜	3½x7	3x4½	30	675 lbs.	4,000 lbs.	29.50
108	Steel	30	34	4x⅜	3½x7	3x4½	32	675 lbs.	4,000 lbs.	28.50
109	Steel	30	34	5x⅜	3½x7	3x4½	32	700 lbs.	4,000 lbs.	30.00

Extra Capacity—For the wood-wheel styles, 5,000 pounds capacity, add $2.00 to price; for 6,000 pounds capacity add $7.00 to price.

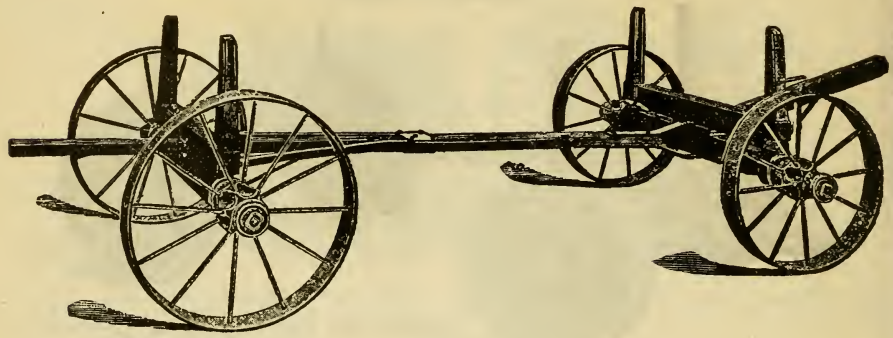
Thickness of Tires. Ten years' experience has demonstrated that tires ¼-inch in thickness on our wood wheels are amply strong and durable for all wagons of 5,000 pounds capacity or less. However, we put on ⅜-inch tires at $2.50 per wagon extra. ⅜-inch tires are always furnished on three-ton styles.

Prices F. O. B. Factory.

Note.—A catalogue illustrating other kinds will be mailed upon request.

DEALERS' HANDY WAGON.

Shipped from Factory.



OUR DEALERS' HANDY WAGON WITH 28 IN. FRONT, 30 IN. REAR WHEELS AND 4 x 3⅜ IN. PLAIN TIRE.

The above are considered the standard height wheels for a farm truck of this style and makes the top of bolsters 22 inches from the ground, though other heights as noted in the specifications.

Below we give complete specifications and wish to lay special stress on the following points: We use nothing but *hickory* and *oak* in the construction, the life of which is four or five times that of maple or other soft woods; rear hounds are angle steel with pressed steel hound plates, not merely braces as are being used on most of the cheap trucks; skeins on the standard truck are 3¼x10 inches, full length bearing in hub; equipped with our best steel wheels; solid cast hub, which is stronger and better in every way than a light malleable hub; wagon is guaranteed to carry 4,000 pounds.

MATERIAL:—Axles, hickory; bolsters, tongue, etc., best oak, thoroughly seasoned.

STANDARDS:—14 inches high, set in pockets made of 3 inch iron.

REAR HOUNDS:—Made of 1¾ inch angle steel, and are bolted securely to the axles and bolsters. They are also bolted to the pressed steel hound plate, which has a bolt running through coupling pole, so that wagon can be lengthened or shortened as desired.

WHEELS:—Our best steel wheels with solid cast hub; oval staggered wrought steel spokes and wrought steel tires.

FINISH:—Wheel painted green; remainder of gear red and varnished, making a very neat appearance.

TRACK:—Wide, 5 feet. Narrow, 4 feet 8 inches, center to center of tire. Bolsters on wide track wagon, 3 feet 6 inches; narrow track, 3 feet 2 inches, between standards. We can change the distance between the standards to suit your customer's bed without extra charge, if specified in order.

3¼x10 in. Skein. Prices of Wagon with Plain Tire. 4000 lbs. Capacity.

Height of Wheels		Size of Skein Inches	Capacity	PRICES OF DEALERS' HANDY WAGONS f. o. b. cars factory Dimensions are width and thickness of tire.					
Front Inches	Hind Inches			4x⅜	4x½	5x⅜	5x½	6x⅜	6x½
28	30	3¼x10	4000 lbs.	$18.40	$19.55	$19.55	$20.70	$20.70	$21.85
30	32	3¼x10	4000 lbs.	20.40	21.60	21.65	22.80	22.80	24.00
32	34	3¼x10	4000 lbs.	21.80	22.80	22.80	24.00	24.00	25.20
34	36	3¼x10	4000 lbs.	22.80	24.00	24.00	25.20	25.20	26.40

EXTRAS:—Neckyoke, single and doubletrees, add $1.75 to above prices. Brake, add $3.00 to above prices.

PIANO BODY TOP BUGGY.

Shipped from factory.

No. D600.

Cloth Trimming and J-Seat.

	Net price each.
Drill Top	$37.80
Full Rubber Top	39.00
Full Leather Top	42.60
Leather Quarter Top	40.20

Extras.

	Net price each.
Leather Trimming over Cloth	$1.00
Drill Trimming, deduct	1.00
Leather Trimming over Drill	2.00
Spring Cushion on Drill Trimmed Job	.25
Bailey Body Loops	.35

DESCRIPTION.

BODY—17, 20, 22 or 24x54 inches. Concave seat risers. Body screwed, glued and plugged.

GEAR—Oil-tempered, easy riding springs. 15-16 inch Long Distance axles with Collinge Bell collars. ARCH OR DROP. Full plated reaches. Rear king bolt fifth wheel. Cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44. Full bolted, oval edge steel tires.

PAINTING—Gear, green or red, neatly striped. Body, black, fancy decorated (plain black or neatly striped body if preferred.)

UPHOLSTERING—Green or blue cloth, whipcord, moroccoline, or genuine trimming leather. Carpet.

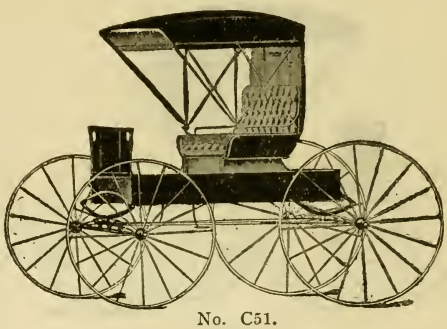
TOP—Three or four bows. Leather quarters, rubber drill roof, back curtain, back stays and side curtains; genuine full rubber top or full drill top. Cloth lined. Storm apron.

SHAFTS—Good quality. Nicely finished.

No. 600. With leather quarter top will have spring cushion and padded seat ends.

PIANO BODY TOP BUGGY.

Shipped from factory.



No. C51.

Cloth Trimming, and J-Seat.

	Net price each.
Full Rubber Top	$44.40
Full Leather Top	48.00
Leather Quarter Top	45.60

Extras.

	Net price each.
Genuine Leather Trimmings	$2.00
Leather Back Curtain on Leather ¼ Top.	1.25

DESCRIPTION.

BODY—17, 20, 22 or 24x54 inches. High lazy back. Padded seat ends. Soft spring cushion. Concave seat risers. Swell panels. Body screwed, glued and plugged. Japanned seat handles. Metal edge boot.

GEAR—Oil-tempered, easy riding springs. One-piece wrought iron Bailey body loops. 15-16 inch Long Distance axles with Collinge Bell Collars. Arch or drop. Full plated reaches. Full circle, double plate rear king bolt fifth wheel. Cemented axle caps.

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

PAINTING—Gear, a fine shade of red or Brewster green, neatly striped. Body, plain black (striped or decorated if ordered.)

UPHOLSTERING—Green or blue cloth, whipcord, or genuine trimming leather. Half length carpet. Carpeted side panels.

TOP—Leather quarters with rubber roof and back curtain, rubber side curtains; full leather top with rubber side curtains, or genuine full rubber top. Cloth lined. Storm apron. Three or four bows. Full wrought shifting rail.

We will equip any of our vehicles with rubber tires at prices named below.

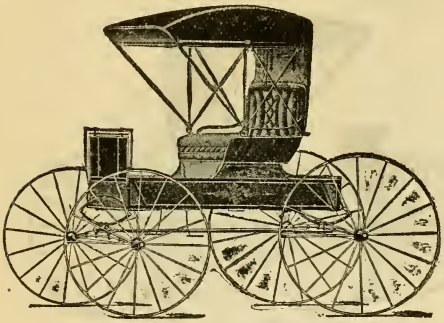
GUARANTEED SOLID RUBBER TIRES.

¾	inch	36x40	and 38x42	$13.20
¾	inch	40x44	and 42x46	14.40
⅞	inch	36x40	and 38x42	15.60
⅞	inch	40x44	and 42x46	16.80
1	inch	36x40	and 38x42	18.00
1	inch	40x44		19.20
1⅛	inch	40x44		21.60

Shipped from the factory.

FANCY TOP BUGGY.

Shipped from factory.



No. C50.

Cloth Trimmings, and J-Seat.

	Net price each.
Full Rubber Top	$47.25
Full Leather Top	50.70
Leather Quarter Top	48.30

Extras.

	Net price each.
Genuine Leather Trimmings	$1.25
Leather Back Curtain on Leather Quarter Top	1.25

For rubber tires see bottom of page 149.

DESCRIPTION.

BODY—17, 20, 22 or 24x54 inches. High spring back and spring cushion. Padded seat ends. Genuine patent leather dash. Concave seat risers. Swell panels. Body glued, screwed and plugged.

GEAR—Tull sweep, oil-tempered springs. One-piece wrought iron Baily body loops. 15-16 inch Long Distance dust-proof axles with Collinge Bell collars. Arch or drop. Axle caps perfectly fitted. Full circle, double plate, rear king bolt fifth wheel.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires.

PAINTING—Gear, rich shade of red or fine shade of green, fancy striped. Body, seat and back mahogany finish, elegantly decorated.

UPHOLSTERING—Heavy green or blue cloth, whipcord, or green, maroon or tan genuine leather. Nickel seat handles, prop nuts, hub bands, double bar dash rail and lazy back rail. Fancy stitched fall. Floor carpet; carpeted side panels.

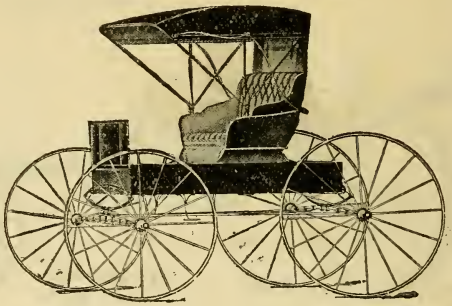
TOP—Leather quarters and leather back stays, with genuine rubber roof, back and side curtains; full leather with rubber side curtains, or genuine full rubber top. Cloth lining. Sewed valances. Fancy silk stitched back stays and side lacings. Three or four bows. Storm apron. Looking glass in back stays.

SHAFTS—Good quality hickory. Leather trimmed. Nicely finished.

Shipped from the factory.

AUTO SEAT TOP BUGGY.

Shipped from factory.



No. C233.

Cloth Trimmings.

	Net price each.
Full Rubber Top	$48.60
Full Leather Top	52.20
Leather Quarter Top	49.80

Extras.

	Net price each.
Genuine Leather Trimmings	$2.00
Leather Back Curtains on Leather Quarter Top	1.25

For rubber tires see bottom of page 149.

DESCRIPTION.

BODY—20, 22 or 24x54 inches. Square-cornered wide auto seat. Padded seat ends. Soft spring cushion. Concave seat risers. Swell panels. High back. Body screwed, glued and plugged. Metal edge boot.

GEAR—Oil-tempered, easy riding springs. One-piece wrought iron Baily body loops. 15-16 inch Long Distance axles with Collinge Bell collars. Arch or drop. Full clipped axles and full plated reaches. Full circle, double plate rear king bolt fifth wheel. Cemented axle caps.

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

PAINTING—Gear, a fine shade of red or Brewster green, neatly striped. Body, plain black (striped or decorated if ordered.)

UPHOLSTERING—Green or blue cloth whipcord or genuine trimming leather. Half length carpet. Carpeted side panels.

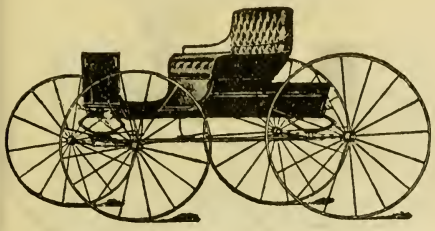
TOP—Leather quarters with rubber roof and back curtain, rubber side curtains; full leather top with rubber side curtains, or genuine full rubber top. Cloth lined. Storm apron. Three or four bows.

SHAFTS—Good quality hickory. Nicely finished. Leather trimmed.

Shipped from the factory.

ROAD WAGON.

Shipped from factory.



No. R89.

Net price each.

Imitation Leather Trimmed $31.20
Leather Trimmed 33.60
Cloth or Morocco trimmed..... 32.40

Extras.

Net price each.

With Punt Body, Full length Carpet and Body Rail $1.50
With Stick Seat 2.50

For rubber tires see bottom of page 149.

DESCRIPTION.

BODY—New style. High panel spring back. Body screwed, glued and plugged. Boot.

GEAR—Long, easy riding, oil-tempered springs 15-16 inch Long Distance axles with Collinge Bell collars. Arch or drop. Rear king bolt fifth wheel. Full clipped axles and full plated double reaches. Full length body loops. Cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge, steel tires.

PAINTING—Gear, a fine shade of green or a rich shade of red, neatly striped. Body, black, nicely decorated.

UPHOLSTERING—Whipcord, cloth, genuine leather, morroccoline, or imitation leather, Brussels rug.

SHAFTS—Good quality hickory. Nicely finished.

STICK SEAT ROAD WAGON.

Shipped from factory.

No. R87.

Net price each.

Imitation Leather Trimming.....$33.50
Leather Trimming 36.00
Cloth or Moroccoline 35.00

No. R189.

One grade cheaper throughout.

Net price each.

Imitation Leather Trimming.....$29.40
Leather Trimming 31.00

For rubber tires see bottom of page 149.

DESCRIPTION.

BODY—Handsomely moulded. Swell spindle stick seat. Spring cushion. High patent leather dash. Body screwed, glued and plugged.

GEAR—Oil-tempered, easy riding springs. 15-16 inch Double Collar axles. Arch or drop, Rear king bolt fifth wheel. Full clipped axles. Full length body loops. Cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

SHAFTS—Good quality hickory. Nicely finished.

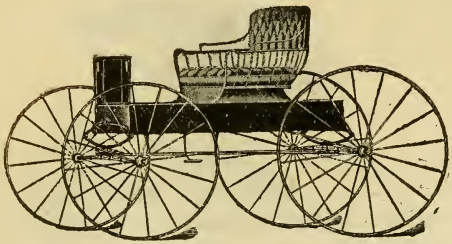
WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44 1 inch, 40-44. Full bolted, round edge, steel tires.

PAINTING—Gear, a fine shade of green or a rich shade of red, nicely striped. Body, black, neatly striped.

UPHOLSTERING—Whipcord, green or blue cloth, or green maroon or tan leather. Carpet. Boot.

DRIVING WAGON.

Shipped from factory.



No. C76.

Whipcord Cloth or Moroccoline.

	Net price each.
Style K, Spindle Seat	$39.00
Style H, Combination Seat	40.20
Style L, Panel Seat	39.00
Style D, Auto Seat	42.00

No. D76.

Imitation Leather Trimmed with Spindle seat or L Panel Seat. Same as C76 only one grade cheaper. Sold for cash only. Price $32.50

Extras on all above.

	Net price each.
Genuine Leather Trimmings	$2.00

For rubber tires see bottom page 149.

DESCRIPTION.

BODY—17, 20, 22 or 24x54 inches. Swell spindle stick seat. Spring cushion. 12-inch patent leather dash, open hand-holds. Swell panels. Concave seat risers.

GEAR—Oil-tempered springs 15-16 inch Long Distance dust-proof axles with Collinge Bell collars. Arch or drop. One-piece wrought iron Bailey body loop, clipped on. Full circle rear king bolt fifth wheel. Hand fitted and perfectly cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SECOND GROWTH HICKORY. Sarven patent, ¾ or ⅞ inch, 36-40, 38-42 or 40-44.

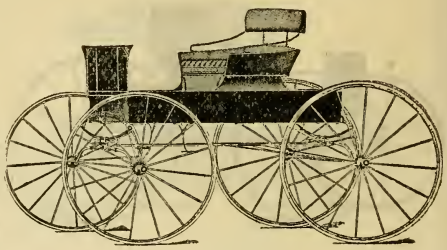
PAINTING—Gear, Perfection red or Brewster green, double line stripe. Body, plain black; inside panels finished.

UPHOLSTERING—Whipcord, green or blue cloth, or genuine trimming leather. Full length Brussels carpet.

SHAFTS—Good hickory. Leather trimmed. Shipped from the factory.

BIKE DRIVING WAGON.

Shipped from factory.



No. C210.

Whipcord or Cloth.

	Net price each.
Style L, Panel Seat	$42.00
Style H, Combination Seat	43.50
Style K, Spindle Seat	43.50
Style D, Plain Auto Seat	46.50

Extras.

	Net price each.
Genuine Leather Trimmed on all above	$2.00

For rubber tires see bottom page 149.

DESCRIPTION.

BODY—22 or 24x56 inches. 12-inch patent leather dash. New style board seat. Soft spring cushion.

GEAR—High arch axles. Concealed axle caps. Full circle double plate fifth wheel, rear king bolt. One-piece wrought iron Bailey body loops. Long, easy riding, open head springs. 15-16 inch Long Distance axles with Collinge Bell collars.

TRACK—4 ft. 4 in., 4 ft. 8 in. or 5 ft. 2 in.

PAINTING—Gear, Perfection red or Bronze green, double line striping. Body, plain black.

WHEELS—High grade, Sarven patent, ¾ or ⅞ inch, 38-40 or 40-42. Round edge, steel tires, or ¾ or ⅞-inch solid rubber tires; can also furnish 1⅛ inch cushion rubber tires. (Be sure to specify which is desired.)

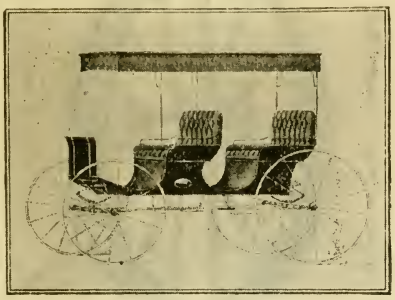
UPHOLSTERING—Fine whipcord, extra heavy green or blue broadcloth or genuine leather. Full length Brussels carpet.

SHAFTS—Good hickory. Genuine leather trimmed.

Shipped from the factory.

CANOPY TOP SURREY.

Shipped from factory.



No. C21.

Cloth Trimming.

	Net price each.
With Top	$63.60
Without Top	55.25

Extras.

	Net price each.
Genuine Leather Trimmings	$3.00
Pole instead of Shafts	1.75
Lamps	2.00
Half Fenders	3.00
Full Fenders	6.00

For rubber tires see bottom Page 149.

DESCRIPTION.

BODY—As shown in cut. Spring cushions. High Spring backs. Patent leather dash. Steel rocker plates.

GEAR—Full sweep, oil-tempered, easy riding springs. Full length body loops. 1⅛ inch Long Distance axles with Collinge collars. Arch or drop. Axle caps perfectly fitted, cemented and full clipped. Rear king bolt fifth wheel.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, ⅞ inch, 36-40 or 40-44; 1 inch, 38-42 or 40-44; 1⅛ inch, 20-44. Full bolted, oval edge, steel tires.

PAINTING—Gear, a fine shade of green or rich shade of red, neatly striped. Body, black, nicely striped.

UPHOLSTERING—Good quality of green or blue cloth, moroccoline or green maroon, or tan genuine leather. Full length worsted carpet.

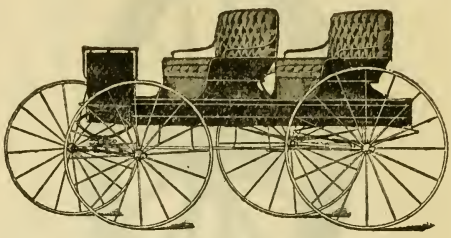
TOP—Canopy with rubber deck and curtains, deep fringe, cloth head lining.

SHAFTS—Good quality hickory, neatly finished.

Shipped from the factory.

THREE SPRING WAGON.

Shipped from factory.



No. W194.

	Net price each.
Imitation Leather Trimming	$44.40
Leather Trimming	48.00
Cloth or Moroccoline	46.20

Extras.

	Net price each.
Canopy Top and Curtains	$8.00
Pole instead of Shaft	1.75
Leather Dash	.75
Ash Body and Varnished Wheels	1,25
Yellow Gear	1.25

For rubber tires see bottom Page 149.

DESCRIPTION.

BODY—30x76 inches. TWO THREE-QUARTER BACKS. Wood dash with nickel rail. Leather dash if ordered. Full width drop end gate. Removable seats. Hardwood floor running lengthwise. Body and seats are made entirely of selected white ash.

GEAR—Three oil-tempered elliptic springs. 1⅛ inch double collar steel axles. Norway wrought iron clips and bolts used throughout. Reach plate full length.

TRACK—Narrow (4 ft. 8 in. (or wide) 5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, ⅞ inch, 20-44; 1 inch, 38-42 or 40-44; 1⅛ inch, 40-44. Full bolted, oval edge, steel tires.

PAINTING—Gear, Brewster green or red, neatly striped or natural finish. Varnished ash body, finely striped. Painted if ordered.

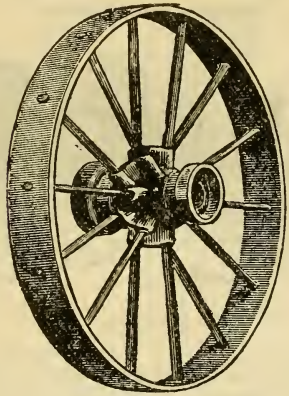
UPHOLSTERING—Imitation leath pegamoid, or genuine leather.

SHAFTS—Good hickory. Well ironed, nicely finished.

Shipped from the factory.

METAL WHEELS.

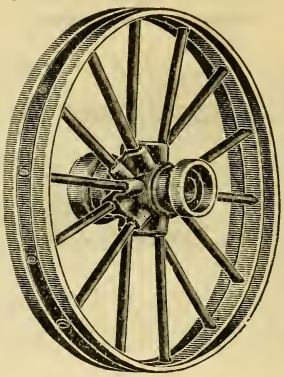
Shipped from Factory.



PLAIN TIRE.

The farmer of today must have a low wagon and the cheapest way to get one, is to order a set of low steel wheels with either 4 inch, 5 inch, or 6 inch tire; 4 inch is considered the standard and we advise same for most all purposes. He can either use them on an old gear which he may have or can purchase very cheaply, or put them on his new farm wagon. He would very seldom want to put on high wheels, not more than half a dozen times during the year and it is very little trouble to change back and forth.

We furnish these wheels to fit any size spindle, simply measure the skeins according to the directions given on page 155 and we will furnish wheels that will fit the wagon.



GROOVED TIRE.

This cut represents our Truck wheels which we are putting on the market for stony roads. They do not wear out the rub lock as do the wheels made with the spokes projecting through the rims. We make these wheels with special grooved rim, and allow the spokes, in addition to the tapering head (as the tires are punched with tapering holes, large size out), to have a large head so as to make them perfectly strong, in fact, stronger than can be made by countersinking the holes in tires of wheels as do other manufacturers of wheels.

These Wheels are made to fit any size skein and iron axles.

We particularly recommend them to the users of Wheels in stony countries, as the heads of the spokes are protected so as not to come in contact with the rocks.

Grooved tires can be furnished only in 4 inch width—either ⅜ or ½ inch thick.

NET PRICE FOR ONE WHEEL.

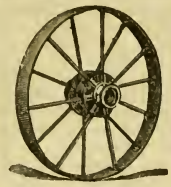
Diam.	3x⅜	3x½	4x⅜	4x½	5x⅜	5x½	6x3⅜	6x½
24	$2.36	$2.75	$2.55	$2.95	$2.94	$3.28	$3.21	$3.69
26	2.50	2.90	2.68	3.08	3.08	3.54	3.38	3.88
28	2.68	3.08	2.81	3.23	3.32	3.82	3.64	4.18
30	2.78	3.19	3.06	3.51	3.43	3.94	3.76	4.32
32	2.88	3.31	3.31	3.81	3.57	4.10	3.91	4.50
34	3.17	3.64	3.57	4.10	3.92	4.50	4.30	4.94
36	3.28	3.77	3.75	4.30	4.08	4.69	4.48	5.15
38	3.60	4.14	3.85	4.40	4.46	5.14	4.90	5.63
40	3.75	4.27	4.15	4.80	4.59	5.28	5.03	5.78
42	3.85	4.41	4.30	4.95	4.76	5.47	5.22	6.01
44	4.16	4.78	4.65	5.34	5.14	5.90	5.62	6.46
46	4.29	4.93	4.80	5.55	5.31	6.11	5.82	6.70
48	5.00	5.66	5.46	6.28	6.00	6.90	6.54	7.51

Note.—Grooved Tire Wheels cost 25 cents extra, each.

⅜ in. tired wheels carry 4000 lbs., ½ in. tired wheels carry 5000 lbs.

Note.—See next page diagram for ordering.

GENEVA METAL WHEELS.
Shipped from Factory.



Heavy Pattern.

For loads 5,000 lbs. per Set of Four wheels

Net Price per Each Wheel.

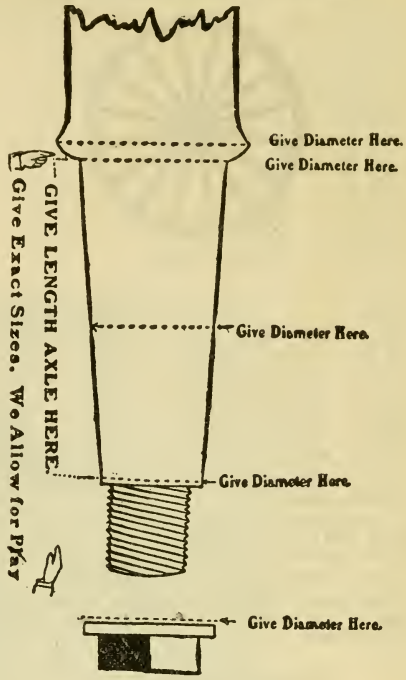
Diam.	Spokes.	Tire. ½x3 ⅜x4	Tire. ⅜x5	Tire. ½x4	Tire. ⅜x6
24 in.	10	$4.10	$4.25	$4.40	$4.55
26 in.	10	4.25	4.40	4.55	4.60
28 in.	12	4.40	4.55	4.65	4.80
30 in.	12	4.55	4.70	4.70	4.95
32 in.	12	4.70	4.85	4.95	5.10
34 in.	14	4.85	5.00	5.10	5.25
36 in.	14	5.00	5.15	5.25	5.40
38 in.	14	5.15	5.30	5.40	5.65
40 in.	16	5.30	5.48	5.55	5.70
42 in.	16	5.48	5.60	5.70	5.85
44 in.	16	5.60	5.75	5.85	6.00
46 in.	18	5.75	5.90	6.00	6.15
48 in.	18	5.90	6.10	6.15	6.30

Made to fit any standard size skein 9 in., 10 in. or 11 in. long.

For fitting hubs to solid axles add 30c per wheel.

For hubs 12 inches long add 25c per wheel.

MEASURING CHART

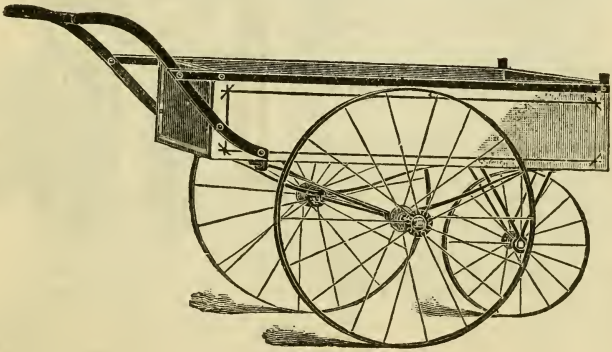


PRICES ON METAL WHEELS ARE F. O. B. FACTORIES.

THEY ARE ALL MADE TO ORDER AND SHIPPED DIRECT.

No. 14 HAND CART.

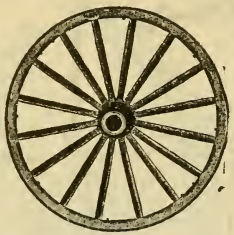
Shipped from Factory.



Size inside of body 39x20½ in. Depth 9½ in. Wheel 26 in., Front 14 in. Capacity 250 lbs.
Net price each $7.00

Has a wood body and is well ironed; is strong, durable, neat and light.

SARVEN PATENT WHEELS.



Sarven Wheel.

Sizes. Thread.	Spoke.	Hub.	Net price per set. First Grade.	Second Grade.
¾ in.	$\frac{15}{16}$ in.	6½ in.	$ 7.25	$ 6.00
⅞ in.	1 $\frac{1}{16}$ in.	6½ in.	7.50	6.50
1 in.	1⅛ in.	6½ in.	8.00	6.75
1⅛ in.	1¼ in.	7 in.	9.00	7.60
1¼ in.	1⅜ in.	7½ in.	12.00	10.00
1⅜ in.	1½ in.	8 in.	17.00	13.00
1½ in.	1⅝ in.	8½ in.	20.00	16.00

We carry only first and second grades in untired wheels.

Note.—Regular heights carried in stock, 3^2, 3^6, 3^4 and 3^8, 3^6 and 3^{10}. We can furnish any height desired on short notice.

These Wheels are strictly first-class.

Half sets Wheels at half price of full sets; quarter sets at quarter price of full sets and 25 cents added.

WOOD HUB WHEELS.

Shipped direct. Prices same as Sarven Wheels.

TIRED WHEELS.

For Wheels with Tire Set ADD the following to the prices above:

¾x$\frac{3}{16}$	$1.65	1⅛x¼	$2.75
¾x¼	1.80	1⅛x$\frac{5}{16}$	3.05
⅞x$\frac{3}{16}$	1.75	1¼x$\frac{5}{16}$	3.50
⅞x¼	2.00	1¼x⅜	4.05
1 x$\frac{3}{16}$	1.80	1⅜x⅜	4.35
1 x¼	2.25	1½x½	6.30

SPECIAL GRADE SARVEN WHEELS. FURNISHED ONLY WITH TIRES ALL SET.

To meet competition we are offering "Special Grade" Wheels with tires attached, suitable for repair work. We guarantee them to be better than any wheel sold elsewhere at the same price. A good repair wheel. Can furnish only sizes and heights named below:

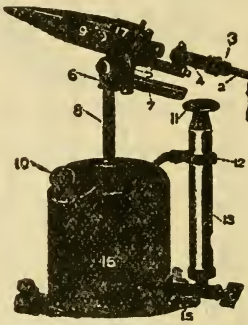
Tire.	Spoke.	Hub.	Height.	Net price per set.
¾x$\frac{3}{16}$	$\frac{15}{16}$ in.	6½ in.	3^4 3^8 3^6 3^{10}	$7.00
⅞x¼	1 $\frac{1}{16}$ in.	6½ in.	"	7.75
1 x¼	1⅛ in.	6½ in.	"	8.50
1⅛x¼	1¼ in.	7 in.	"	10.00
1¼x$\frac{5}{16}$	1⅜ in.	7½ in.	"	13.50

Half sets at half price of full sets; quarter sets at quarter price of full sets and 25 cents added.

SETTING BOXES.

When Axles and Tired Wheels are ordered, we can set the boxes if you wish, and charge for 1¼-inch axles and smaller 75 cents per set, 1⅜ and 1½ in. $1.00 per set. The work is carefully done by an experienced wagonmaker. We do not set boxes in Untired Wheels. We only set boxes when old boxes are sent us charges prepaid or both axles and boxes are purchased. If you order a gear and want boxes set in the wheels add 45 cents for express on axle boxes from gear factory to us. We do not paint wheels.

THE RELIABLE PAINT BURNER.

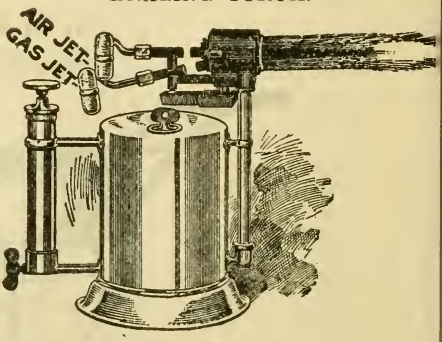


No. 15.

Is an Automatic Air Pressure Burner, throwing a powerful blue flame from six to eight inches in length; flame can be thrown up or down or straight ahead, without changing position of hand that holds.

Price each $3.50

BRAZING TORCH.



No. 92.

The Turner Double Jet Gasoline Torch No. 92. Polished Brass, one quart size, each.$5.00

Especially adapted for Rubber Tire Work.

Guaranteed to produce a 1,000 degree hotter blast than any other brazing torch now on the market.

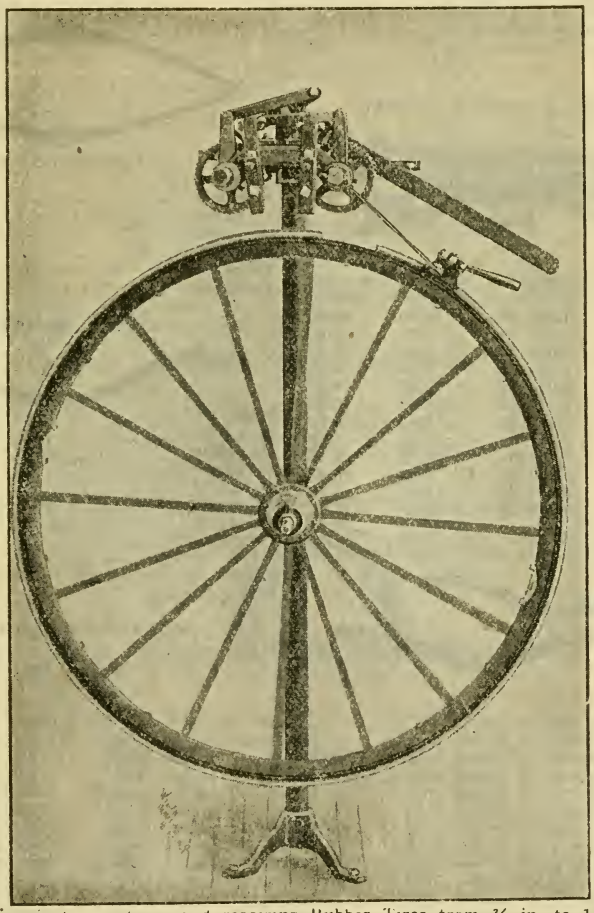
No brazing torch ever put on the market has ever equalled this one for reliable service.

HEAVY-SARVEN AND WARNER WHEELS.

We quote for shipment direct from the factory.

Spoke	Hub		Maximum				Net price per Set	
			Rim		Height			
Size	Diam.	Length	Thread	Depth	Front	Hind	Grade 1	Grade 2
1 7/16	4 1/8	7 1/2	1 7/16	1 5/8	Any height desired not exceeding 4 feet.	Any height desired not exceeding 4 feet 8 inches.	$14 75	$12 00
1 1/2	4 5/16	7 1/2 & 8	1 1/2	1 3/4			16 50	13 00
1 9/16	4 5/8	8 & 8 1/2	1 9/16	1 3/4			17 50	14 50
1 5/8	5	8 1/2 & 9	1 5/8	1 7/8			19 65	16 00
1 3/4	5 5/8	8 1/2 & 9	1 3/4	1 1/4			23 50	20 50
1 7/8	6	9 to 11	1 7/8	1 1/4			27 00	23 50
2	6 3/8	10 to 11	2	2 1/2			30 00	24 50
2 1/8	6 3/8	10 to 11	2 1/8	2 1/2			33 00	26 50
2 1/4	6 5/8	10 to 11	2 1/4	2 3/4			36 00	28 50
2 3/8	7	11 to 12	2 3/8	3			39 00	31 50
2 1/2	7 1/4	11 to 13	2 1/2	3			42 00	33 00

SWEET'S RUBBER TIRING MACHINE.



This machine is for applying and repairing Rubber Tires from 3/4 in. to 1 1/2 in. We can fully recommend it to you as being the best ever produced. It is self contained, finishing the job without removing the wheel, takes up very little space, requires very little power, and is so simple that anyone can run it.

The Rubber Tire business has reacheda condition that every repair shop, also every repository should be equipped to put on and repair rubber tires. This machine makes it possible for them to do this at a small cost. We guarantee satisfaction, or no pay. Complete directions as to how to operate machine, also lengths of rubber to use on each size wheel, weights of rubber and channel and other necessary information sent with machine. Net price each.....$13.00

Shipped from Factory.

RUBBER TIRE ACCESSORIES.

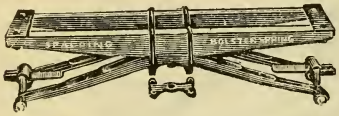
Net price per set.

Tire Wire No. 10½ for ¾, ⅞ and 1 inch rubber $0.35
Tire Cement, Net price per pint can..... .45
Brass Lined Brazing Sleeves on Collars, Net price per doz..... .15
Channel Steel Tire, See page 8.
Channel Tire Swages, See page 26.

WAGON SEAT SPRINGS.

Sizes.	Net price per pair.
1¼ wide, 2 leaf, 24 inches long	$0.48
1⅜ wide, 2 leaf, 25 inches long	.50
1½ wide, 2 leaf, 26 inches long	.55
1½ wide, 3 leaf, 28 inches long	.80

SPALDING BOLSTER SPRING.



Net price per set.

Width.	No. Leaf.	Springs to Carry.	For 38-in. Bolster	For 42-in. Bolster
1½	3	1,000 lbs.	$3.50	$4.00
1½	4	1,500 lbs.	3.75	4.00
1¾	4	2,000 lbs.	4.50	5.00
1¾	5	2,500 lbs.	5.00	5.50
2	5	3,000 lbs.	5.50	6.00
2	6	4,000 lbs.	6.00	6.50
2	7	5,000 lbs.	6.50	7.00
2½	6	6,000 lbs.	8.00	8.75
2½	7	7,000 lbs.	8.75	9.50
2½	8	8,000 lbs.	9.50	10.25
2½	9	9,000 lbs.	10.25	11.00
2½	10	10,000 lbs.	11.00	11.75

Springs 6,000 capacity and larger and all 42-inch bolsters shipped direct from factory.

ELLIPTIC SPRINGS.

No. 7½, Half Double Sweep, Berlin Heads.

Sizes.	Net price each.
1¼x3x36	$0.90
1¼x4x36	1.05
1¼x5x36	1.25
1½x4x36	1.40
1½x5x36	1.65
1½x6x36	1.75

Note.—We can furnish other sizes from factory.

ELLIPTIC SPRINGS.

No. 5. Full Elliptic Button Head.

Sizes.	Net price each.
1¼x3x34	$0.85
1¼x4x34	.90
1¼x3x36	.95
1¼x4x36	1.15
1½x4x36	1.40
1½x5x36	1.65

CART SPRINGS.

Sizes.	Net price each
1¼x4x38	$0.70
1¼x4x40	.75
1⅜x4x38	.75
1⅜x4x40	.80
1½x4x38	.80
1½x4x40	.85
1½x5x42	1.10

Our springs are made by the best spring makers in the country—oil-tempered. Tested before shipping.

PLATFORM SPRINGS.

Cut shows No. 15 Side and No. 16 Cross Platform Springs (put together.)

Width of Steel.	Side Spring.	Cross Spring.	Net price per set 2 Cross, 4 Side Springs	
1¼	4 leaves, 38 inches long	5 leaves, 40 inches long	700 lbs.	$4.75
1¼	4 leaves, 40 inches long	5 leaves, 42 inches long	650 lbs.	5.10
1⅜	4 leaves, 38 inches long	5 leaves, 40 inches long	900 lbs.	5.10
1⅜	4 leaves, 40 inches long	5 leaves, 42 inches long	825 lbs.	5.50
1½	4 leaves, 38 inches long	5 leaves, 40 inches long	1000 lbs.	5.60
1½	4 leaves, 40 inches long	5 leaves, 42 inches long	950 lbs.	5.75
1½	5 leaves, 40 inches long	6 leaves, 42 inches long	1400 lbs.	7.10
1½	6 leaves, 40 inches long	7 leaves, 42 inches long	1725 lbs.	7.95
1¾	5 leaves, 40 inches long	6 leaves, 42 inches long	1725 lbs.	8.35
1¾	6 leaves, 40 inches long	7 leaves, 42 inches long	2100 lbs.	9.85
2	6 leaves, 40 inches long	7 leaves, 42 inches long	2450 lbs.	11.50
2	7 leaves, 40 inches long	8 leaves, 42 inches long	2700 lbs.	12.45
2¼	8 leaves, 40 inches long	9 leaves, 42 inches long	3250 lbs.	16.40
2½	8 leaves, 40 inches long	9 leaves, 42 inches long	3800 lbs.	17.50

Broken Sets, Net Price per lb..... $0.06½

Two-inch and larger shipped from factory.

No. 1 BENT HICKORY RIMS.

Eight Pieces to a set for 4 Wheels.

Sizes.		Per Set.	How Packed and Heights carried in stock.
⅞ x 1	Deep	$1.20	Full set in bundle 3^4-3^8-3^6-3^{10}.
1 x 1	Deep	1.20	
⅞ x 1⅛	Deep	1.20	Half set in bundle 3^2-3^4-3^6-3^8-3^{10}.
1 x 1⅛	Deep	1.20	
1 x 1¼	Deep	1.28	Half set in bundle 3^2-3^4-3^6-3^8-3^{10}-4.
1⅛ x 1⅛	Deep	1.25	Full set in bundle 3^6-3^{10}.
1⅛ x 1¼	Deep	1.35	
1⅛ x 1½	Deep	1.95	
1¼ x 1¼	Deep	1.35	
1¼ x 1½	Deep	1.95	
1⅜ x 1⅜	Deep	1.65	
1½ x 1½	Deep	1.95	Full set in bundle 3^4-3^8-3^6-3^{10}-3^8-4.
1⅝ x 1⅝	Deep	2.20	Full set in bundle 3^8-4.
1¾ x 1¾	Deep	2.45	

BEVELED HICKORY BUGGY RIMS.

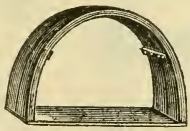
¾ x 1⅛	Deep	$1.50	Half set in bundle 3^2-3^4-3^6-3^8-3^{10}-.
⅞ x 1⅛	Deep	1.50	
1 x 1⅛	Deep	1.60	
1 x 1¼	Deep	1.70	

HICKORY HAY RAKE RIMS.

Four Pieces to a set for 2 Wheels.

1¼ x 1¼	Deep	$1.00	Full set in bundle 4^8.
1⅜ x 1⅜	Deep	1.05	

BENT OAK WAGON AND TRUCK RIMS.

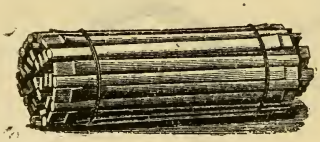


Eight Pieces to a set for 4 Wheels.

1¾ x 2	Deep	$2.15	Half set in bundle 3^2-3^4-3^6-3^8-3^{10}-4.
1¾ x 2¼	Deep	2.55	
1¾ x 2½	Deep	3.50	Half set in bundle 3^8-4.
2 x 2	Deep	2.35	Half set in bundle 3^4-3^6-3^8-3^{10}-4.
2 x 2¼	Deep	2.95	
2 x 2½	Deep	3.50	
2½ x 2	Deep	2.95	Single pieces 3-3^2-3^4-3^6-3^8-3^{10}-4.
3 x 1½	Deep	2.75	Single pieces 3-3^2-3^4-3^6-3^8.
3 x 2	Deep	3.60	
3½ x 1½	Deep	3.35	
3½ x 2	Deep	4.20	
4 x 1½	Deep	3.75	
4 x 2	Deep	4.95	

NOTICE:—We do not break bundles of rims. Special sizes ordered upon request. Our rims are strictly up to grade and better quality than many firms' who grade higher.

OAK WAGON SPOKES.



Fifty-two Spokes to a set.

OAK WAGON SPOKES.

WHITE OAK SECOND GROWTH A. B.

Our A. B. grade is a new grade of white oak, second growth, and is made up of selected A. and B. stock with the larger percentage of A. grade.

These spokes are of excellent quality—try them.

Sizes.	Price Per Bundle Fronts	Price Per Bundle Hinds	Price Per Full Set
1½ inch	$1.45	$1.75	$3.20
1⅝ inch	1.50	1.95	3.45
1¾ inch	1.75	2.20	3.95
1⅞ inch	1.85	2.35	4.20
2 inch	2.10	2.60	4.70
2⅛ inch	2.20	2.75	4.95
2¼ inch	2.40	3.05	5.45
2⅜ inch	2.60	3.10	5.70
2½ inch	2.85	3.35	6.20
2⅝ inch	2.85	3.60	6.45
2¾ inch	3.20	3.75	6.95
3 inch	3.30	3.90	7.20

We do not break bundles.

WHITE OAK EXTRA A OR XXX.

Sizes.	Price Per Bundle Fronts	Price Per Bundle Hinds	Price Per Full Set
1½ inch	$1.10	$1.40	$2.50
1⅝ inch	1.20	1.55	2.75
1¾ inch	1.40	1.85	3.25
1⅞ inch	1.50	2.00	3.50
2 inch	1.65	2.10	3.75
2⅛ inch	1.75	2.25	4.00
2¼ inch	2.00	2.50	4.50
2⅜ inch	2.10	2.65	4.75
2½ inch	2.30	2.95	5.25
2⅝ inch	2.50	3.00	5.50
2¾ inch	2.65	3.10	5.75
3 inch	2.75	3.25	6.00

We do not break bundles

PIN AND RED OAK—OUR SPECIAL.

Sizes.	Price Per Bundle Fronts	Price Per Bundle Hinds	Price Per Full Set
1¾ inch	$0.95	$1.20	$2.15
1⅞ inch	1.00	1.30	2.30
2 inch	1.10	1.40	2.50
2⅛ inch	1.25	1.50	2.75
2¼ inch	1.35	1.65	3.00
2⅜ inch	1.50	1.75	3.25
2½ inch	1.55	1.85	3.40
2⅝ inch	1.65	2.00	3.65
2¾ inch	1.75	2.20	3.95
3 inch	1.90	2.40	4.30

We do not break bundles.

SELECT REPAIR SPOKES.

Sizes.	Price Each.	Sizes	Price each.
⅞ inch	$0.05	1⅞ inch	$0.06
1 inch	.05	2 inch	.06
1 1/16 inch	.05	2⅛ inch	.07
1⅛ inch	.05	2¼ inch	.08
1¼ inch	.05	2⅜ inch	.08
1⅜ inch	.05	2½ inch	.08
1½ inch	.05	2⅝ inch	.09
1⅝ inch	.05	2¾ inch	.09
1¾ inch	.05	3 inch	.10

SARVEN WHEEL SPOKES.

Sizes.	Net price each.	Sizes	Net price each
⅞ inch	$0.05	1¼ inch	$0.05½
1 inch	.05	1⅜ inch	.06
1 1/16 inch	.05	1½ inch	.09
1⅛ inch	.05	1⅝ inch	.10

SHELL BAND WHEEL SPOKES.

Sizes.	Price each.	Sizes.	Price each.
⅞ inch	$0.06½	1⅛ inch	$0.06½
1 inch	.06½	1¼ inch	.06½
1 1/16 inch	.06½		

WARNER WHEEL SPOKES.

Sizes.	Price each.	Sizes.	Price each.
⅞ inch	$0.06½	1⅛ inch	$0.06½
1 inch	.06½	1¼ inch	.06½
1 1/16 inch	.06½		

RAKE SPOKES.

Sizes.		Sizes.	
1½ inch	$0.07½	1¾ inch	$0.07½

Our stock of spokes, rims, hubs, shafts and general woodwork is of honest quality; we carry a large, clean stock and highly recommend same to our customers.

SECOND GROWTH HICKORY WOOD HUB SPOKES.

B—Grade.

Sizes.	Net price per set.	Sizes.	Net price per set.
⅞ inch	$3.15	1¼ inch	$3.50
1 inch	3.15	1⅜ inch	3.50
1 1/16 inch	3.15	1½ inch	3.75
1⅛ inch	3.15	1⅝ inch	3.75

We do not break bundles.

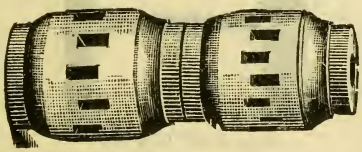
C—Grade.

Sizes.	Net price per set.	Sizes.	Net price per set.
⅞ inch	$2.20	1¼ inch	$2.50
1 inch	2.20	1⅜ inch	2.50
1 1/16 inch	2.20	1½ inch	2.85
1⅛ inch	2.20	1⅝ inch	2.85

Note.—Our Wood Stock is the best.

We do not break bundles.

BLACK BIRCH HUBS.



Dodge Mortise Straight End.

Sizes.	Net price per set.	Sizes.	Net price per set.
5 x7	$0.90	7 x 9½	$1.20
5½x7	.90	7½x 9	1.20
6 x7	1.00	8 x10	1.50
6 x8	1.03	8½x10	1.55
6 x8½	1.05	8½x11	1.65
6½x8	1.05	9 x11	1.70
6½x8½	1.10	9 x12	1.85
7 x8½	1.20	9½x12	1.90
7 x9	1.20	10 x12	2.00

Less than full sets, 10c extra per hub.

BLACK BIRCH HUBS.

Dodge Mortise Cupped.

Length is measured inside cup.

Sizes.	Net price per set.	Sizes.	Net price per set.
7½x 8½	$1.25	8½x11	$1.80
7½x 9	1.30	9 x11	1.85
8 x 9	1.50	9 x12	2.05
7½x10	1.50	9½x11	1.90
8 x10	1.60	9½x12	2.10
8½x10	1.65	10 x12	2.20

Less than full sets, 10c extra per hub.

Note.—Our Hubs are all 12 and 14 Dodge mortise. Be sure to state in your order how many mortises wanted.

HALF FINISHED BUGGY SHAFTS.

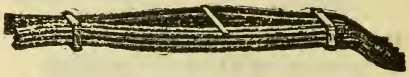
Finished to Bar without Mortise or Bar.

Sizes.	Net price per pair. XX	Net price per doz. pairs. XX
1⅜x1⅞ inch	$1.00	$11.50
1⅜x2 inch	1.00	11.50
1½x2 inch	1.10	12.50
1½x2¼ inch	1.20	14.00

FINISHED BUGGY SHAFTS.

Sizes.	Net price per pair. XX	Net price per doz. pairs. XX
1⅜x1⅞ inch	$1.15	$13.00
1⅜x2 inch	1.15	13.00
1½x2 inch	1.25	14.50
1½x2¼ inch	1.35	16.00

HALF FINISHED DOUBLE BENT HEEL WAGON SHAFTS.



Finished to Bar—Without Mortise or Bar.

Sizes.	Net price per pair. XX
1½x2 inch	$1.50
1½x2¼ inch	1.90
1¾x2¼ inch	1.90
2 x2½ inch	2.40

FINISHED DOUBLE BENT HEEL WAGON SHAFTS.

Finished Cross Bars Included.

Sizes.	Net price per pair. XX
1½x2 inch	$1.70
1½x2¼ inch	2.25
1¾x2¼ inch	2.25
2 x2½ inch	2.75

HALF FINISHED STRAIGHT HEEL WAGON SHAFTS.

Finished to Bar.

Sizes.	Net price per pair. XX	Net price per doz. pairs. XX
1½x2¼ inch	$1.10	$12.50
2 x2½ inch	1.85	21.00

Note.—Our Wood Stock is the best.

No. 18 HALF FINISHED CART SHAFTS.

Single Bend Finished to Bar, without Bar.

Sizes.	Net price per pair. XX
1¾x2¼ inch	$1.55

HALF FINISHED SINGLE BEND POLES.

Sizes.	Net price each. XX	Net price per doz. XX
1¾x2¼ inch	$1.30	$15.00
2 x2½ inch	1.30	15.00
2 x3 inch	1.77	20.50

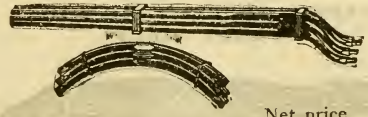
FINISHED SINGLE BEND POLES.

Sizes.	Net price each. XX	Net price per doz. XX
1¾x2¼ inch	$1.65	$19.00
2 x2½ inch	1.65	19.00
2 x3 inch	2.05	24.00

HALF FINISHED DOUBLE BEND POLES.

Sizes.	Net price each. XX	Net price per doz. XX
1¾x2½ inch	$1.30	$15.00
2 x2½ inch	1.30	15.00
2 x3 inch	1.77	20.50

FINISHED DOUBLE BEND POLES.



Sizes.	Net price each. XX	Net price per doz. XX
1¾x2½ inch	$1.65	$19.00
2 x2½ inch	1.65	19.00
2 x3 inch	2.05	24.00

Note.—Our Wood Stock is the best.

FINISHED STRAIGHT OR PLATFORM POLES.

Sizes.	Net price each. XX	Net price per doz. XX
2x2½ inch	$1.50	$17.50

FINISHED POLE CIRCLES.

Sizes.	Net price per doz.
1¼, 1⅜ and 1½ inch	$2.60
Net price each	.25

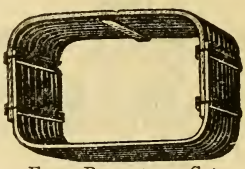
Our Shafts and Poles are strictly up to grade and better quality than many firms who grade them higher.

CUTTER AND SHAFT CROSS BARS.

Finished.

Sizes.	Net price each.	Net price per doz.
1⅜x1⅞ and 1½x2 inch	$0.20	$2.00
1¾x2¼ inch	.30	3.20

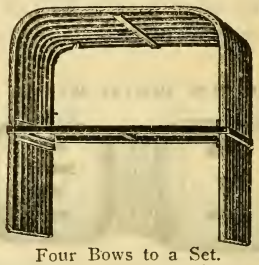
BUGGY BOWS.



Four Bows to a Set.
To be used with Steel Bow Sockets.

Sizes.	Net price per set.
Buggy Bows ¾x1¼ inch 32-34-36-38-40-42-46 in.	$0.40

EXPRESS WAGON BOWS.

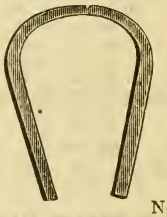


Four Bows to a Set.

Sizes.	Net price per set.
⅞x1⅜ inch 34-36-38-40-42-44-46-48 in.	$1.25

Note.—Give width outside.

BENT WAGON HOUNDS.



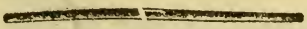
Sizes.	Net price each.
Bent Wagon Hounds, 2x3 inch	$0.90

IRON BUGGY SHAFTS.

Sizes.	Net price per pair.
1⅜x1⅞ inches, XXX, finished in white	$2.00
1½x2 inches	2.10

The above shafts painted and trimmed for 60c extra.

ROUND END BUGGY SINGLETREE WOODS.



Sizes.		Net price. Each.	Doz.
1⅜x1⅞	inch	$0.18	$1.80
1½x2	inch	.20	2.15
1½x2¼	inch	.25	2.50

SWORD OR FLAT END SINGLETREES.

Sizes.		Net price. Each.	Doz.
1¼x1¾	inch	$0.22	$2.35
1⅜x1⅞	inch	.22	2.35
1⅜x2	inch	.22	2.35

HICKORY WAGON SINGLETREE WOODS.

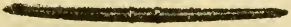
Oval.

Sizes.		Net price. Each.	Doz.
2 x2⅝	inch	$0.18	$1.85
2⅛x2¾	inch	.20	2.00
2¼x3	inch	.23	2.40

Round.

Sizes.		Net price. Each.	Doz.
2½	inch Center	$0.20	$2.10
2⅝	inch Center	.22	2.35

HICKORY BUGGY AND EXPRESS NECK YOKE WOODS.



Sizes.		Net price Each.	Doz.
1½x42	Acorn End, 2nd Growth	$0.17	$1.80
1¾x42	Acorn End, 2nd Growth	.18	1.90
1⅞x42	Acorn End, 2nd Growth	...	2.00
2 x42	Acorn End, 2nd Growth	.20	2.10

FINISHED BUGGY NECK YOKES.

Sizes.	Net price each.
1½, 1¾ and 2 inch, in the white	$0.40
1½, 1¾ and 2 inch, painted black	.55

JOCKEY NECK YOKE WOODS.

Net price per dozen	$1.50
Net price each	.15

HICKORY WAGON NECK YOKE WOODS.

Sizes.		Net price. Each.	Doz.
2½x38	inch	$0.29	$3.00
2⅜x42	inch	.35	3.50
2¾x44	inch	.35	3.60
3 x48	inch	.40	4.25
3¼x48	inch	.42	4.50

HICKORY BUGGY AND EXPRESS EVENERS.

Dressed and Rounded. Forest.

		Each.	Doz.
1⅜x2¼x48	Buggy, XXX	$0.25	$2.75
1⅝x2⅝x48	Express, XXX	.30	3.00
1¾x2¾x48	Heavy Express, XXX.	.30	3.25
1¾x3 x48	Heavy Express, XXX	.35	3.40

HICKORY WAGON EVENERS.

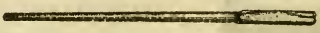
Dressed and Rounded.

Sizes.		Net price. Each.	Doz.
1¾x1½x48	in. Light Wagon	$0.35	$3.75
2 x4 x48	in. Farm Wagon	.35	3.75

TURNED HICKORY AXLES.

Sizes.		Net price each.
2½	inch Skein	$0.62
2¾	inch Skein	.82
3	inch Skein	.95
3¼	inch Skein	1.12
3½	inch Skein	1.25
3¾	inch Skein	1.40
4	inch Skein	1.55

WHITE ASH FINISHED POLES.



Square Butts.

Sizes.		Net price each.
3	inch at doubletree	$1.30
3¼	inch at doubletree	1.30
3½	inch at doubletree	1.30
3¾	inch at doubletree	1.35
4	inch at doubletree	1.35

IRONED WAGON SINGLETREES.

2x2⅝x36 inch.

Sizes.	Net price per doz.
⅝ inch Center Clips and ½ inch Rings, 1¼ End Ferrules and ⅜ inch Hooks	$4.50
Price each	.40

IRONED WAGON NECK YOKES.

Sizes.	Net price per doz.
2⅝x40 inch long	$6.25
Price each	.55

EVERLASTING JOCKEY NECK YOKES.

Net price per pair $1.10

Note.—The Everlasting Goods are Stronger, More Durable and Lighter and Neater in appearance than any made.

CUTTER RUNNERS.

Portland.

Sizes.	Net price per pair.
1¼ inch	$1.00

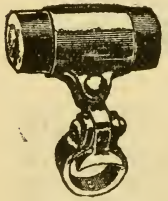
IRONED WAGON DOUBLETREES.

Sizes.	Net price each.
2x4x48 inches long	$0.70

AUTOMATIC-GRIP NECK YOKES.

Acorn Ends Japanned.

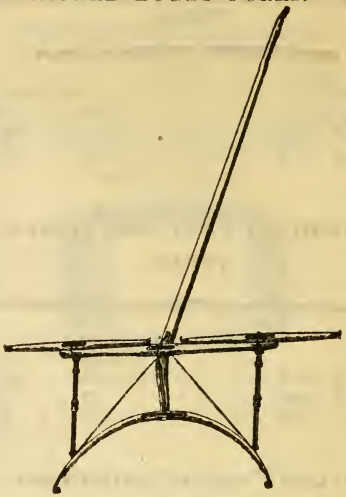
Sizes.	Net price each.
No. 2 Fits 1⅛ to 1¼ Pole Tip	$0.50
No. 10 Fits 1⅜ to 1½ Pole Tip	.50
No. 11 Fits 1⅝ to 1⅞ Pole Tip	.50



AUTOMATIC GRIP NECK YOKE CENTER.

Sizes.	Net price each.
Buggy	$0.30
Carriage	.30
Spring Wagon	.30

IRONED BUGGY POLES.



Sizes.	Net price each.
1¾x2½ inch	$3.75
2 x2½ inch	3.85

XXX Finished complete with Singletrees and Doubletrees, including Neck Yoke.

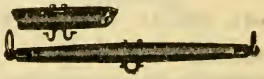
Note.—We can furnish above painted black for 75c extra.

OVAL BREAST YOKE, NEW YORK STYLE.

Net price per pair.

No. 48-A.—Oval woods, 2⅜x2x23 in., ¾ in. forged steel staple at center, 7/16 in. eye-bolts, 5/16 in. rings $0.85

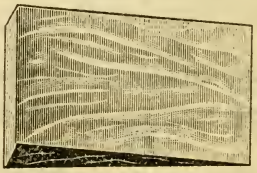
NEW ERA BREAST YOKE.



Net price per pair.

No. 45-A.—Round woods, 1⅞ in. x 21 in. split staple, 7/16 in. eye-bolts, 5/16 in. rings $0.85

SPOKE WEDGES.



No.		Net price per 1,000
54-A.	⅜x1¼ in.	$0.55
54-B.	½x1¼ in.	.55
54-C.	⅝x1¼ in.	.65
64-D.	¾x1¼ in.	.70

1,000 in package. We do not break packages.

BENT OAK FOR RUNNERS.

Regular Bend, Four to a Set.

Sizes.	Net price per set.
1¾ inch Tread, 2 inch Deep	$1.55
2 inch Tread, 2 inch Deep	1.60
2 inch Tread, 2½ inch Deep	2.00
2 inch Tread, 3 inch Deep	2.40
2 inch Tread, 4 inch Deep	3.00
2 inch Tread, 4½ inch Deep	3.80
2 inch Tread, 5 inch Deep	4.45
2½ inch Tread, 2 inch Deep	2.05
2½ inch Tread, 4 inch Deep	3.80
3 inch Tread, 2 inch Deep	2.25
3½ inch Tread, 2 inch Deep	2.40
4 inch Tread, 2 inch Deep	2.60
4½ inch Tread, 2 inch Deep	2.85
5 inch Tread, 2 inch Deep	3.05
5 inch Tread, 2½ inch Deep	3.55
6 inch Tread, 2 inch Deep	3.85

VALENTINE'S PURE COLORS IN OIL.

BLACKS.

	Net price per lb.
Jet Black	25c
Ivory Black	22c
Drop Black	22c
Coach Black	21c
Lettering Black	20c
Refined Lamp Black	18c

BLUES.

	Net price per lb.
Prussian Blue	60c
Ultramarine Blue	35c

REDS.

	Net price per lb.
Western Red	40c
Tuscan Red	30c
English Vermillion, L and D	$1.00
American Vermillion, L and D	25c
Coach Painters' Vermillion	60c
Indian Red	20c
Venetian Red	13c

GREENS.

	Net price per lb.
Chrome Green, L M and D	18c
Blind and Shutter Green, L M and D	18c

YELLOWS.

	Net price per lb.
Chrome Yellow, L M O and D O	22c
Yellow Ochre	12c

BROWNS.

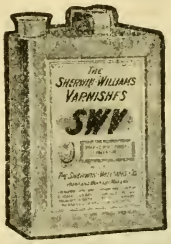
	Net price per lb.
Raw and Burnt Sienna	18c
Raw and Burnt Umber	17c
Vandyke Brown	18c

VALENTINE'S SUPERFINE COACH COLORS.

GROUND IN JAPAN.

	Net price per lb.
Coach Black	$0.30
American Vermillion, L	.40
American Vermillion, D	.40
Coach Painters' Vermillion	1.00
Wine Color, L	.40
Wine Color, D	.40
Brewster Green, L	.50
Brewster Green, D	.50

SHERWIN-WILLIAMS COACH VARNISHES.



This is unquestionably the best all around varnish made. Give it a trial. It will do your work to your satisfaction. Packed in half-gallon and gallon cans.

Sizes in stock.	Net price each. ½ Gals.	Gals.
Wearing Body Varnish (finishing coats, best work)	$1.80	$3.40
Finishing Gear Varnish (finishing running parts)	1.58	2.95
Heavy Gear Varnish (one coat finishing, general work)	1.35	2.55
No. 1 Gear Varnish (quick drying finishing, ordinary work)	1.12	2.12
Quick Rubbing (a 2-day rubbing)	1.35	2.55
No. 1 Rubbing Varnish (a quick rubbing, ordinary work)	1.12	2.12
Quick Black Rubbing Varnish for under coats (ordinary work)	1.35	2.55
Coach Japan (for drying and hardening paints)	.68	1.28
No. 1 Coach (a one-coat coach varnish)	.72	1.36

VALENTINE'S COACH VARNISHES.

Sizes in stock.	Net prices each. Per quart.	Per gallon.
Wearing Body Varnish (for finishing coats only)	$1.50	$5.75
Elastic Gear Varnish (for finishing running parts)	1.25	4.75
One Coat Coach Varnish (for finishing coats on ordinary work)	1.15	4.25
One Coat Gear Varnish (for finishing running parts, ordinary work)	.90	3.30
Quick Leveling Varnish (two day rubbing)	1.00	3.80
Crown Coach Japan (for drying and hardening paints)	.48	1.67

ROUGH STUFFS.

Sizes in stock.	Net price.
Lawson's, in 5, 10 and 20 lb. pails, per lb.	15c
Valentine's, in 10 and 20 lb. pails, per lb.	22c

NEAL'S CARRIAGE PAINTS.

Colors.	Net prices per can. Qt.	Pt.	½ Pt.
Citron Yellow	50c	30c	20c
Vermillion	65c	40c	28c
Acme Wine	50c	30c	20c
Coach Green	50c	30c	20c
Carmine Red	65c	40c	28c
Brewster Green	50c	30c	20c
Raven Coach Black	50c	30c	20c

LUCAS WAGON PAINTS.

Mixed Ready for Use.

Colors.	Net price per can. Qt.	½ Gal.	Gal.
Black	40c	75c	$1.40
Red	40c	75c	1.40
Yellow	40c	75c	1.40
Green	40c	75c	1.40

Note.—There are no better Wagon Paints on the market than ours.

PINE TAR.

Sizes.	½ Pt.	Pt.	Qt.	Gal.
Net price each	10c	15c	20c	50c

COAL TAR.

	Qt.	½ Gal.	Gal.
Net price each	20c	40c	55c

SHELLAC.

	Net price per can. Gal.	½ Gal.	Qts.	Pts.	½ Pts.
White Shellac	$3.00	$1.70	$1.00	$0.55	$0.30
Orange Shellac	2.75	1.60	.85	.50	.30

ASPHALTUM.

Gallon cans	$1.10
Half gallon cans	.60
Quart cans	.45

PUMICE STONE.

	Net price per lb.
Lump Pumice in bulk	10c
Pulverized Pumice in bulk	5c

WHITE LEAD.

	Net price per lb.
White Lead in Oil, in 12½, 25, 50 and 100 lb. kegs	Prices on application.

OILS.

	Net price per gallon
Challenge Machinery	Prices on application.
Eldorado Machinery	Prices on application.
Cylinder Machinery	Prices on application.
Raw Linseed Oil	Prices on application.
Boiled Linseed Oil	Prices on application.
Lard Oil	Prices on application.
Turpentine	Prices on application.
Japan Dryer	Prices on application.
Separator	Prices on application.

SHERWIN-WILLIAMS LARGE TUBE QUICK DRYING STRIPING COLORS.

Colors in stock.	Net price each.
Striping Black	15c
Spanish Carmine	30c
Empress Scarlet	20c
Iroquois Red	20c
Aztec Red	20c
Mohawk Red	15c
Coach Green	15c
Fernleaf Green	15c
Imperial Blue	22c
Ultramarine Blue	16c
Hoffman Brown	15c
Flake White	15c
Ivory White	15c
Chrome Yellow	15c
Yellow Ochre	15c
Gold Imitation	15c

Japan or Quick Drying Colors.

DRY COLORS.

	Net price per lb.
Metallic Red	2c
Chrome Green	16c
Venetian Red	2c
Red Lead	10c
White Lead	12c
American Vermillion	15c
Yellow Ochre	2½c
Chrome Yellow	17c
Whiting	3c
Paris Plaster	3c
Burnt Umber	5c
Raw Umber	5c
Ultramarine Blue	25c
Lamp Black, 1 lb. papers	15c
Lucasene Vermillion	25c

MATHER'S THOUSAND MILE AXLE OIL.

One pint cans, net price each.....25c

LE PAGE'S LIQUID GLUE.

Sizes.	Net price each.
Small Bottles	$0.10
Half pint	.25
Pints	.40
Quarts	.65

SCRAP GLUE.

	Net price per lb.
Best Made Scrap	15c
Pulverized	15c

GLUE POTS.

Tinned Inside.

No.	00	0	1	2	3	4
Size in pints	¾	1¼	1½	2	2½	3½
Net price each	39	43	48	60	72	86c

AXLE GREASE.

Sizes.	Net price each.
Shining Light Axle Grease, 1 lb. Tin Cans	$0.10
Shining Light Axle Grease, 3½ lb. Tin Cans	.25

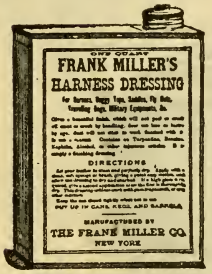
FRANK MILLER'S HARNESS GOODS.

HARNESS SOAP.

Net price each 13c

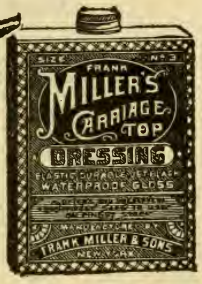
Net price each.

Harness Composition 18c



Net price each.

Pints Dressing 20c
Quarts Dressing 35c
Half pints Oil 15c
Pints Oil 25c



Net price each.

Pints Axle Oil 20c
Quarts Axle Oil 35c
Half pints Top Dressing.....25c
Pints Top Dressing 40c

NEAL'S CARRIAGE TOP DRESSING.

Net price each.

Half pint cans 20c
Pint cans 30c

TINTED GLOSS PURE OIL LUCAS HOUSE PAINTS.

Sizes in stock. Net price each.

	Gals.	Half Gals.	Qts.
House Colors	$1.60	$0.85	$0.50
Outside White	1.65	.85	.50
Black	1.60	.85	.50
Vermillion	....	1.25	.70
Window Blind Green..	....	1.25	.70

The Lucas is not a cheap paint, but equal to any made.

CHALLENGE.—We give full measure, eight pints to the gallon.

We challenge a competitive practical test of this paint against any other liquid or mixed paint in the market, wherever manufactured. It is a RECOGNIZED STANDARD for brilliancy, durability, covering capacity and quality.

While experience proves it is impossible to provide against all contingencies governing the application of paint, to produce in every case a perfect or satisfactory result, either where machine or hand-mixed paints are used, we are willing to redress any dissatisfaction that may be properly chargeable to this paint. An assurance of this kind from a house of our responsibility, we think, will commend itself to all purchasers of paint.

LUCAS FLOOR PAINTS.

Net price each.

Color.	Half Gals.	Qts.
Yellow	$0.70	$0.40
Red	.70	.40
Grey	.70	.40
Brown	.70	.40
Salmon	.70	.40
Sage	.70	.40
Green	.70	.40

CHISEL BRISTLE FLOWING VARNISH BRUSHES.

No. 31. Palace Triple Thick White.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.30	2½ inch	$0.80
1½ inch	.40	inch	1.00
2 inch	.60		

BLACK CHISEL BRISTLE FLOWING VARNISH BRUSHES.

No. 43. Globe Double Thick.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.15	2½ inch	$0.50
1½ inch	.25	3 inch	.70
2 inch	.35		

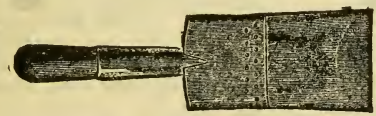
Note.—All selected Chinese Black Bristles, very soft and elastic. Nickel bound.

CHISEL FLAT BRISTLE VARNISH BRUSHES.

No. 49. Crow Chisel.
Double thick black.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.10	2½ inch	$0.25
1½ inch	.15	3 inch	.30
2 inch	.20		

CHISEL BRISTLE FLOWING VARNISH BRUSHES.



No. 57. Ruby Chisel.
Double thick white.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.20	2½ inch	$0.50
1½ inch	.30	3 inch	.60
2 inch	.40		

ACME CHISELED VARNISH BRUSHES.

No. 65. Chisel.

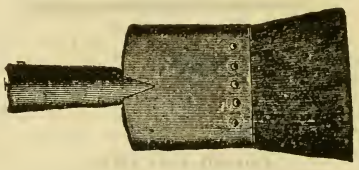
Sizes.	Net price each.	Sizes.	Net price each.
8 inch	$0.30	14 inch	$0.70
9 inch	.40	16 inch	.80
10 inch	.50	18 inch	.90
12 inch	.60		

EXTRA CAMEL HAIR MOTTLING BRUSHES.

No. 309. Square.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.15	2 inch	$0.30
1½ inch	.25	2½ inch	.40

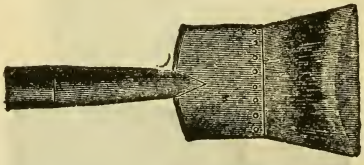
FITCH HAIR FLOWING BRUSHES.



No. 318. Single Thick Chisel.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.30	2 inch	$0.50
1½ inch	.40	2½ inch	.60

SINGLE THICK BADGER HAIR FLOWING BRUSHES.



No. 325. Chisel.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.30	2 inch	$0.60
1½ inch	.45	2½ inch	.75

SASH TOOLS.

No. 257. Extra French.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.06	4 inch	$0.12
2 inch	.08	6 inch	.15
3 inch	.10	8 inch	.18

No. 252. Congo.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.10	7 inch	$0.20
3 inch	.12	9 inch	.25
5 inch	.15		

CAMEL HAIR DAGGER STRIPERS.

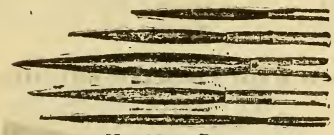
No. 287.

Net price each.

Sizes 1, 2, 3 and 4 ..... $0.15
Assorted, per doz 1.60

Diagonal Ends, Copper Wire Binding, Hair 1½ to 2½ inches long.

CAMEL HAIR LETTERING AND STRIPING PENCILS IN QUILLS.



No. 283. Rose.

Sizes. Net price each.

1 to 8, Lettering $0.05
Assorted, per doz ..... .45

No. 284. Rose.

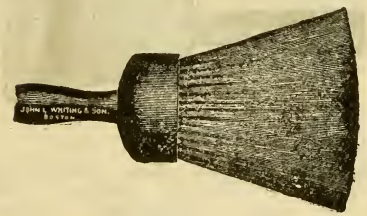
1 to 8, Striping Points $0.05
Assorted, per doz ..... .45

COLOR BRUSHES.

No. 312. Extra Camel Hair.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.35	2 inch	$0.70
1½ inch	.50	2½ inch	1.00

COACH DUSTERS.



No. 222.

Size. Net price each.

2-0 ..... $1.00

All White, fine French Bristles, 4⅛ inches long.

Size 13 ..... .50

Bristles black outside with grey center. 3⅝ inches long.

FLAT PAINT OR WALL BRUSHES.

No. 95 Klondike.

Size, inches	3	3½	4
Net price each	$0.25	.30	.35

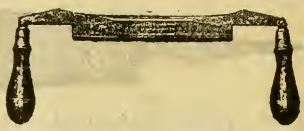
No. 92 Hankon.

Size, inches	3	3½	4
Net price each	$0.40	.50	.60

No. 81 Acme.

Size, inches	3	3½	4
Net price each	$0.70	.85	1.00

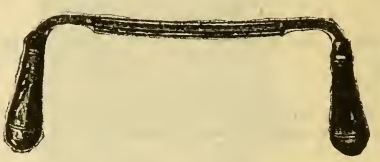
JENNINGS' WAGON MAKERS' DRAW KNIVES.



Sizes. Net price each

8 inch $0.85
9 inch ..... .90
10 inch ..... .95

BARTON'S No. 87 NARROW CARRIAGE KNIVES.



Sizes. Net price each.

8 inch $0.95
9 inch 1.10
10 inch 1.15

Blades ¾ to 1 inch wide, applewood handles, capped and ferruled.

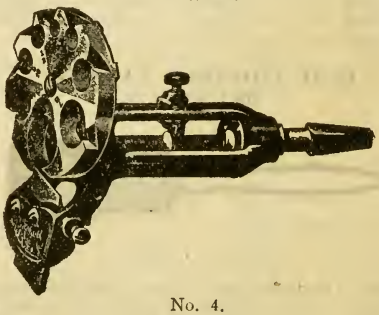
BARTON'S No. 88 WAGON MAKERS' KNIVES.

Sizes. Net price each.

8 inch $0.98
9 inch 1.10
10 inch 1.12

Heavy blades, 1¼ to 1¾ inch wide, black walnut handles, capped.

BONNEY ADJUSTABLE HOLLOW AUGER.

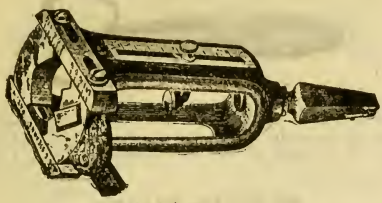


No. 4.

Cuts from ⅜ to 1 inch.

Net price each $0.60

STEARNS' PATENT ADJUSTABLE HOLLOW AUGER.

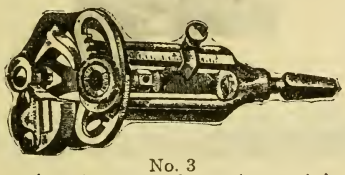


No. 0

The Jaws slide toward and from each other, and may be adjusted to any size from ¼ to 1¼ inches to the scale upon head of tool. They are hardened steel and are secured by screws working in the slots at side of cutter head. The adjustable stop and graduated scale upon body regulate the length of tenon.

Sizes.	Net price each.
No. 0	$3.00

STEARNS' PATENT ADJUSTABLE HOLLOW AUGER.

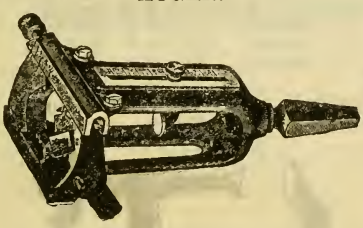


No. 3

Cuts any size tenon from ¼ to 1¼ inches, and pivoted paws are provided with a graduated scale by which the size of the tenon is regulated. To secure required length of tenon a movable stop is operated upon a graduated scale with rulings to sixteenths.

Sizes.	Net price each.
No 3	$3.00

SARGENT'S ADJUSTABLE HOLLOW AUGER.

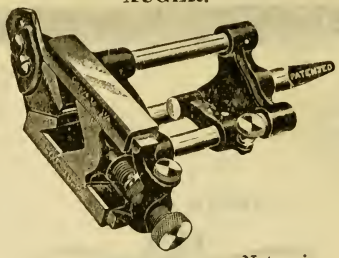


No. 50.

This Auger is made of malleable iron and steel, and the jaws are moved by means of right and left hand screw. It will cut any size tenon from ¼ to 1¼ inches, and may be instantly adjusted. Length of tenon regulated by the adjustable stop and graduated scale.

Sizes.	Net price each.
No. 50	$3.90

WOOD'S "UNIVERSAL" HOLLOW AUGER.



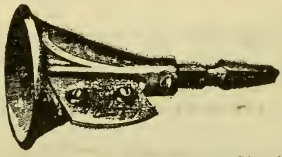
	Net price each.
No. B-1	$3.75

It cuts a tenon of any size from ¼ in. up to 1¼ in., and any length up to 4 in. Knife is adjustable to cut any desired thickness of chip without changing set of Auger as to size of tenon.

ADJUSTMENT.

A simple turn of the large thumb-screw makes complete adjustment for any size of tenon. Just the work of a second, without the use of any tool, and the Auger is set to any size by the gauge, with absolute accuracy, or to suit the size of the bit being used. There is no "cutting and trying." The adjustment is made exactly, and practically instantaneously. The Adjusting Screw has right and left threads, which causes the V-Block and the Knife to move toward or away from the center of the Auger, so that the tenon being cut is always central of the Auger.

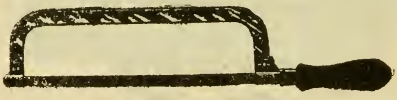
STEARNS' SPOKE POINTERS.



With Graduated Adjustable Shank.

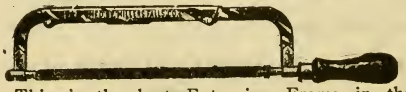
Sizes.	Net price each.
No. 1, Points up to 1⅛ inches diameter	55c
No. 2, Points up to 2⅝ inches diameter	75c

GOODELL'S HACK SAWS.



Sizes.	Net price each.
No. 8, for 8 inch blade, solid steel	37c
No. 9, for 9 inch blade, solid steel	41c

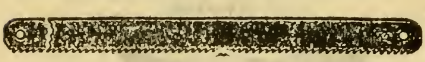
STAR HACK SAW FRAME.



This is the best Extension Frame in the market. It is light and quickly adjusted, having strength in the middle where strength is needed. It is made of tempered steel, polished and nickel plated. The handles are Cocobola wood, highly finished. It carries blades 6 to 12 inches long.

Sizes.	Net price each.
No. 9, Star Hack Saw Frame	$1.00

HACK SAW BLADES.



Sizes	Net price Doz.	Each.
8 inch	$0.49	$0.05
9 inch	.53	.06
10 inch	.64	.07
12 inch	.79	.08

SPOKE SHAVES.

Net price each.

No. 1, Single, 1¾ inch Cutter.....$0.15

No. 2.

Sizes. Net price each.

No. 2, Double 1¾ inch Cutter, concave and straight $0.25

HERWOOD SCREW DRIVERS.

Hardwood Handle.

Sizes.	Net price each.	Sizes.	Net price each.
2½ in. blade	$0.18	6 in. blade	$0.35
3 in. blade	.20	8 in. blade	.50
4 in. blade	.25	10 in. blade	.60
5 in. blade	.30		

The best Screw Driver made.

BRACE SCREW DRIVER BITS.

Sizes. Net price each.

⅜ inch wide $0.10

7/16 inch wide ..... .10

½ inch wide ..... .10

Special steel, very strong.

FILE CLEANER.

Net price, each $0.08

ADJUSTABLE STEEL COUNTER-SINK.

For Wood Only.

Net price each.

Without Bits $0.35

TINNERS' SNIPS.

Sizes. Net price each.

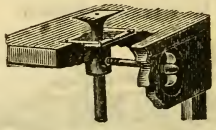
No. 9, Length of cut 3 inches.....$1.10

No. 8, Length of cut 3½ inches..... 1.25

BUTTON'S PLIERS.

Sizes.	Net price each.	Sizes.	Net price each.
4½ inch	$0.20	8 inch	$0.30
6 inch	.25	10 inch	.35

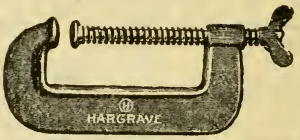
BENCH STOP.



Net price, each.....$0.55

Note.—No springs to get out of order, and no reaching under bench to operate.

SCREW CLAMPS.



Sizes.	Net price each	Sizes.	Net price each
2½ in. opening	$0.10	7 in. opening	$0.32
3 in. opening	.12	8 in. opening	.37
4 in. opening	.17	10 in. opening	.45
5 in. opening	.20	12 in. opening	.55
6 in. opening	.26		

SNOW'S PATENT ADJUSTABLE CLAMPS.

Sizes.	Net price each	Sizes.	Net price each
2 in. opening	$0.40	6 in. opening	$0.70
3 in. opening	.45	7 in. opening	.80
4 in. opening	.50	8 in. opening	.90
5 in. opening	.60		

A spring lever on the side permits of the instant adjustment of this clamp without turning the screw except to tighten the hold.

PERFECTION CLAMP.

Sizes.	Net price each.
2½-foot Clamps	$1.50
3-foot Clamps	1.60
4-foot Clamps	1.80
5-foot Clamps	2.00

Note.—These Clamps are all made of malleable iron parts, wrought iron screws and steel bars.

CLARK'S EXPANSION BITS.

Sizes.	Net price each.
No. 1, Small, cuts ½ to 1½ inch	$0.60
No. 2, Large, cuts ⅞ to 3 inch	.90

AUGERS.

Sizes.	Net price each.	Sizes.	Net price each.
½ inch	$0.21	1⅛ inch	$0.38
⅝ inch	.23	1¼ inch	.42
¾ inch	.25	1½ inch	.53
⅞ inch	.30	1¾ inch	.65
1 inch	.34	2 inch	.76

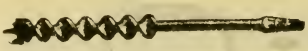
SNELL'S CAR BITS.

Sizes.	Net price each.	Sizes.	Net price each.
¼ inch	$0.33	11/16 inch	$0.65
9/16 inch	.38	¾ inch	.70
⅜ inch	.40	⅞ inch	.85
7/16 inch	.45	15/16 inch	.95
½ inch	.50	1 inch	1.00
9/16 inch	.55		
⅝ inch	.60		

PRATT'S PATENT AUGER HANDLES.

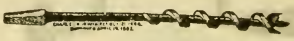
Sizes.	Net price each.
No. 1, 14 inches long	$0.60
No. 2, 17 inches long	.75

JENNINGS' AUGER BITS.



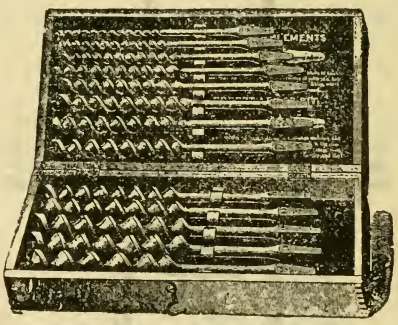
Jennings' Pattern. Sizes.	Net price each.	Jennings' Genuine. Sizes.	Net price each.
3/16 inch	$0.17	3/16 inch	$0.20
¼ inch	.17	¼ inch	.20
5/16 inch	.17	5/16 inch	.21
⅜ inch	.19	⅜ inch	.25
7/16 inch	.22	7/16 inch	.28
½ inch	.25	½ inch	.30
9/16 inch	.27	9/16 inch	.33
⅝ inch	.29	⅝ inch	.35
11/16 inch	.30	11/16 inch	.38
¾ inch	.30	¾ inch	.41
13/16 inch	.35	13/16 inch	.45
⅞ inch	.35	⅞ inch	.49
15/16 inch	.40	15/16 inch	.52
1 inch	.40	1 inch	.56

IRWIN AUGER BITS.



Sizes.	Net price each.	Sizes.	Net price each.
¼ inch	$0.20	11/16 inch	$0.35
5/16 inch	.20	¾ inch	.35
⅜ inch	.21	13/16 inch	.40
7/16 inch	.23	⅞ inch	.40
½ inch	.25	15/16 inch	.45
9/16 inch	.30	1 inch	.45
⅝ inch	.30		

AUGER BITS IN SETS.



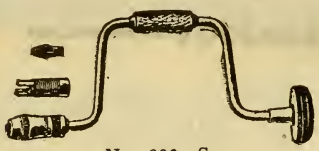
Packed in a Wooden Case. In sets consisting of one bit each. ¼, 5/16, ⅜, 7/16, ½, 9/16, ⅝, 11/16, ¾, 13/16, ⅞, 15/16, 1 inch.

	Net price per set.
Jennings' Pattern	$3.25
Russell Jennings	4.50
Irwin	3.75

PLUG CUTTER.

Sizes.	Net price each.
½ inch	$0.30
9/16 inch	.35
⅝ inch	.40

BIT BRACES.



No. 996—S.

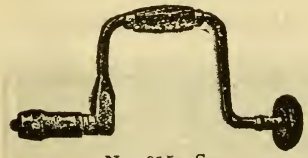
Sizes.	Net price each.
10 inch sweep	$0.35
12 inch sweep	.45

PLAIN BIT BRACE.

No. 916—S.

Sizes.	Net price each.
14 inch sweep	$1.25
12 inch sweep	1.15
10 inch sweep	1.00

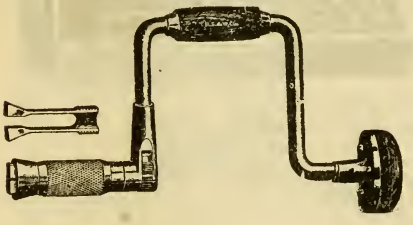
RATCHET BIT BRACE.



No. 915—S

Sizes.	Net price each.
14 inch sweep	$1.25
12 inch sweep	1.15
10 inch sweep	1.00

RATCHET BRACES.



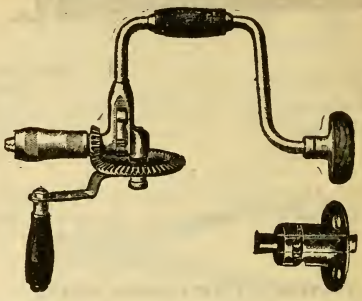
Both Jaws and Sleeve are made of Solid Steel.

Sizes.	Net price each.
No. 1002, 10 inch sweep	$1.60
No. 1001, 12 inch sweep	1.80
No. 1000, 14 inch sweep	1.90

SPOFFORD'S BRACES.

Size.	Each.	Size.	Each.
8 inch sweep	$0.85	14 inch sweep	$1.15
12 inch sweep	1.05	17 inch sweep	1.25

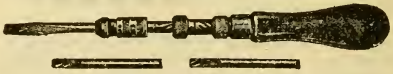
DRILL BRACE WITH BALL BEARINGS.



This is a 10-inch sweep Ratchet Brace with Gear Wheels speeded about three to one; to be used for drilling. The Gear Wheel can be removed when not wanted. The Crank Handle, as shown in the cut, can be extended to gain more power when needed. The Chuck will hold Round or Square Shanks.

Net price, each $2.50

GOODELL REVERSIBLE AUTOMATIC INTERCHANGEABLE SCREW DRIVER.



	Net price per set.
No. 22	$1.15

It drives and draws screws automatically. Has two separate and distinct spirals. Comes with three bits.

DRILL ATTACHMENTS FOR GOODELL AUTOMATIC SCREW DRIVER.

	Net price per set.
No. 2, Fitting No. 22 Aut. Screw-driver	$0.50

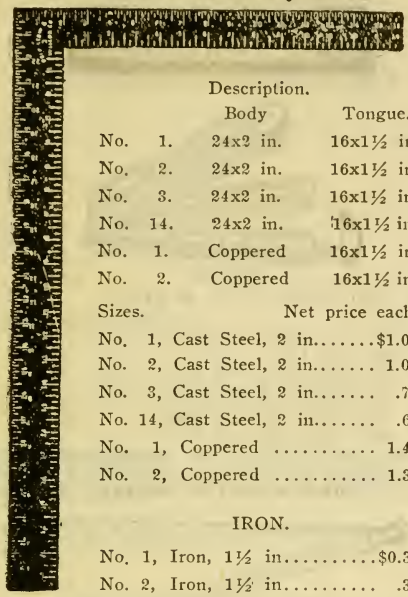
Consists of chuck and eight fluted drill points to be used with automatic screw-driver so as to turn it into a drill chuck same as in automatic drills.

YANKEE RECIPROCATING SCREW DRIVER.

	Net price each.
No. 30	$1.25

Three bits with each tool. Right and left hand spiral ratchet with locking device for holding rigid.

IRON AND STEEL SQUARES.



Description.

	Body	Tongue.
No. 1.	24x2 in.	16x1½ in.
No. 2.	24x2 in.	16x1½ in.
No. 3.	24x2 in.	16x1½ in.
No. 14.	24x2 in.	16x1½ in.
No. 1.	Coppered	16x1½ in.
No. 2.	Coppered	16x1½ in.

Sizes. Net price each.

No. 1, Cast Steel, 2 in.....$1.00
No. 2, Cast Steel, 2 in..... 1.00
No. 3, Cast Steel, 2 in..... .70
No. 14, Cast Steel, 2 in..... .60
No. 1, Coppered 1.40
No. 2, Coppered 1.30

IRON.

No. 1, Iron, 1½ in.....$0.30
No. 2, Iron, 1½ in..... .35

YANKEE RECIPROCATING DRILL.

No. 50.

Net price each.

No. 50 .....$1.75

Drills metal as well as wood. Drills continuously. The head of the tool is provided with ball bearings to reduce the friction. Chuck has three jaws and holds from 0 to $\frac{3}{16}$ inch. No drill points are furnished with this drill. The movement of the drill is 8½ inch. Tool is 16 inches long.

SLIDING "T" BEVELS.

No. 25.

Sizes. Net price each.

6 inch $0.18
8 inch ..... .21
10 inch ..... .22
12 inch ..... .24

The Bevel Blade can be made fast or loose by moving the Lever with the thumb of the hand which grasps the handle, thus leaving the other hand of the workman free.

MARKING GAUGES.

No. 62.

Sizes. Net price each.

No. 62, Marking Gauge.....$0.10
Beechwood, steel point.

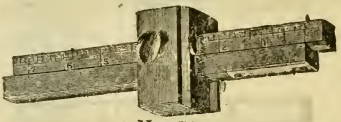
No. 65.

Sizes. Net price each.

No. 65, Marking Gauge.....$0.25
Boxwood, adjustable steel point, plated head, polished brass thumb screw.

Sizes. Net price each.

No. 70, Cutting Gauge.....$0.20
Mahogany, polished plated head, boxwood thumb screw, oval bar, marked steel cutter.



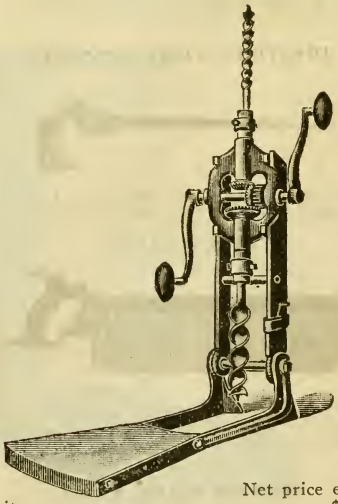
No. 71.

Sizes. Net price each

No. 71 .....$0.40
Patent Double Gauge (marking and mortise gauge combined), beechwood, polished, plated head and bars, brass thumb screws and shoes, oval bars, steel points.

TWO SPEED BORING MACHINE.

Best quality.

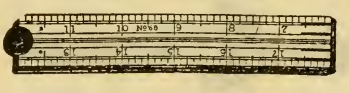


Net price each.

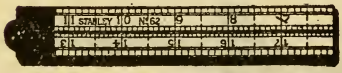
No bits $4.20

This is without doubt the best boring machine on the market. It folds up nicely for the tool chest. It gives speed on one chuck two-thirds that of crank and other chuck one and one-half times of crank. Frame has uprights and rack attachments sufficiently high for boring a hole 11 inches deep.

BOXWOOD RULES.

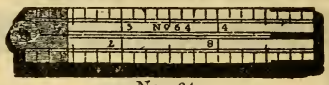


No. 68.

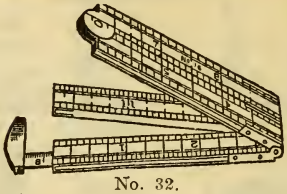


No. 62.

BOXWOOD RULES.



No. 64.

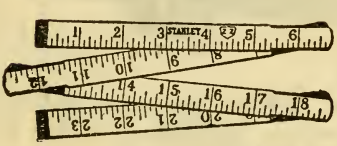


No. 32.

DESCRIPTION OF STANLEY RULE AND LEVEL CO.'S RULES.

No.	Width.	Fold.	Joint.			Net price each.
64	1 ft. ⅝ in.	4	Square	No binding on edge	8th and 16th	12c
57	1 ft. ⅝ in.	4	Arch	Full brass bound	8th and 16th	35c
32	1 ft. 1 in.	4	Arch	No binding on edge	8th, 10th, 12th and 16th	35c
32½	1 ft. 1 in.	4	Arch	Full brass bound	8th, 10th, 12th and 16th	40c
68	2 ft. 1 in.	4	Round	No binding on edge	8th and 16th	10c
63	2 ft. 1 in.	4	Square	No binding on edge	8th, 10th, 12th and 16th	18c
62	2 ft. 1 in.	4	Square	Bound	8th, 10th, 12th and 16th	35c
54	2 ft. 1 in.	4	Arch	Full brass bound	8th, 10th, 12th and 16th, drafting scale	40c

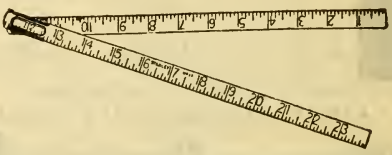
ZIG-ZAG RULES.



Sizes.	Net price each.
No. 4, Four-foot length	30c
No. 6, Six-foot length	40c

Note.—Any of above Rules can be sent by mail. Postage from 4 to 8 cents extra.

BLACKSMITHS' RULE.



Sizes.	Net price each.
Two-foot, two-fold, graduated in 8th of inches, ¾ in. wide	35c

This rule consists of two legs made from spring brass joined together by a brass joint, is particularly adapted for measuring hot metal, as it can be cooled by plunging in water without rusting.

DISSTON'S COMPASS SAWS.

Sizes, inch	10	12	14	16	18
Net price, each	30	32	35	48	55c

BACK SAWS.

Sizes.	Net price each.
10 inch	$0.80
12 inch	.90
14 inch	1.20

BROWN HAND SAWS.

Sizes.	Net price each.
18 inch	$0.60
20 inch	.75
22 inch	.95
26 inch	1.05
28 inch Rip	1.25

DISSTON'S HAND SAWS.

No. 7.

Sizes.	Net price each.
No. 7, 26 inch	$1.35
No. 7, 28 inch Rip	1.55

No. D 8.

Sizes.	Net price each.
No. D 8, 20 inch	$1.26
No. D 8, 22 inch	1.40
No. D 8, 26 inch	1.58
No. D 8, 28 inch Rip	1.80

Note.—We carry a full line of Disston's Saws of all kinds.

BUCK BROS.' SOCKET FIRMER CHISELS.

Sizes	⅛	¼	5/16	⅜	½	⅝	¾
Buck Bros. ..	$0.35	.35	.38	.42	.44	.47	.50
Leather Tipped Bevel Edge Clearcut	.32	.32	.35	.36	.39	.41	.42
Sizes		⅞	1	1¼	1½	1¾	2
Buck Bros. ..		$0.55	.58	.65	.68	.75	.80
Leather Tipped Bevel Edge Clearcut		.44	.46	.49	.52	.55	.58

Net price full set.

Buck Bros., ⅛ to 2 in.....$5.25
Leather Tipped Bevel Edge Clearcut, ⅛ to 2 in. 5.00

BUCK BROS.' SOCKET FRAMING CHISELS.

Sizes	⅝	¾	1	1¼	1½	1¾	2
Buck Bros. ..	$0.70	.75	.80	.85	.90	.95	1.10

SOCKET FIRMER GOUGES.

Sizes	⅛	¼	⅜	½	⅝	¾
Inside Bevel	$0.40	.45	.50	.55	.60	.65
Outside Bevel	.40	.45	.50	.55	.60	.65
Sizes	⅞	1	1¼	1½	1¾	2
Inside Bevel	$0.70	.75	.80	.85	.90	.95
Outside Bevel	.70	.75	.80	.85	.90	.95

BUCK'S TURNING CHISELS.

Sizes	½	¾	1	1¼	1½
Buck's	$0.30	.35	.43	.55	.65

CORNER CHISELS.

Net price each.

Size, inches..... 1
Buck's $1.60

AUTOMATIC BORING TOOLS.

Sizes. Net price each.

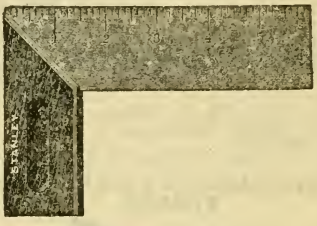
No. 3. All Metal Handle with 8 Drill Points $1.05

TRY SQUARES.

No. 20.

Size Blades, inches	4½	6	7½	9	10	12
Net price, each....	$0.20	.25	.30	.35	.40	.45

COMBINED TRY AND MITRE SQUARES.



Size Blades, inches.....	4½	6	7½	9	12
Net price, each.....	$0.30	.35	.40	.45	.50

Square inside and out. Blades graduated in inches. The handles of these Try Squares have a brass face firmly riveted in position and also the Handy Grip.

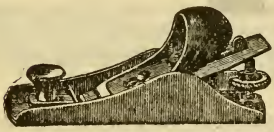
PLATFORM SCALES.

These scales have had an immense sale, and purchasers who buy them are satisfied. These Scales will weigh accurately, and are the best working, best looking, low priced scales made.

Sizes No.	Capacity	Platform	Net price each.
P 6	600 lbs.	17x25 in.	$ 8.00
P 8	800 lbs.	18x26 in.	9.25
P10	1000 lbs.	19x26 in.	10.00

GENUINE BAILEY'S ADJUSTABLE BLOCK PLANES.

Nos. 110, 120.



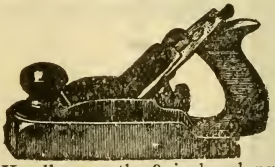
Nos. 9½, 9¾, 15, 16.

Sizes.	Net price each.
No. 110, 7½ in. long, 1¾ in. Cutter	$0.40
No. 120, Adjustable, 7½ in., 1¾ in. Cutter	.52
No. 9½, 6 in. long, 1¾ in. Cutter	.76
No. 9¾, Rosewood Handle, 6 in., 1¾ in. Cutter	.95
No. 15, 7 in., 1¾ in. Cutter	.95
No. 16, Nickel Trimmings, 6 in., 1¾ in. Cutter	.95

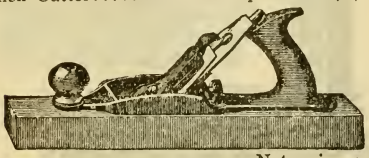
GENUINE BAILEY'S PATENT SMOOTH PLANES.

Sizes.	Net price each.
No. 1, 5½ inches long, 1¼ inch Cutter	$1.15
No. 2, 7 inches long, 1⅝ inch Cutter	1.45
No. 3, 8 inches long, 1¾ inch Cutter	1.50
No. 4, 9 inches long, 2 inch Cutter	1,75

GENUINE BAILEY'S WOOD PLANES.

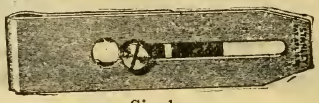


No. 35, Handle smooth, 9 inches long, 2 inch Cutter.....Net price each, $1.25



Sizes.	Net price each.
No. 26, Jack Plane, 15 inches long, 2 inch Cutter	$1.10
No. 28, Fore Plane, 18 inches long, 2⅜ inch Cutter	1.40
No. 29, Fore Plane, 20 inches long, 2⅜ inch Cutter	1.40
No. 30, Jointer Plane, 22 inches long, 2⅜ inch Cutter	1.50
No. 33, Jointer Plane, 28 inches long, 2⅝ inch Cutter	1.65

PLANE IRONS FOR WOOD PLANES.



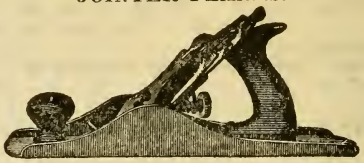
Single.

Sizes, inches	2	2⅛	2¼	2⅜	2½	2⅝	2¾
Net price, each	$0.24	.25	.28	.30	.35	.38	.40

Double.

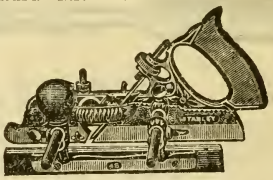
Sizes, inches	2	2⅛	2¼	2⅜	2½	2⅝	2¾
Net price, each	$0.49	.50	.53	.55	.62	.70	.75

GENUINE BAILEY'S JACK AND JOINTER PLANES.



Sizes.	Net price each.
No. 5, Jack Plane, 14 inches long, 2 inch Cutter	$1.76
No. 6, Fore Plane, 18 inches long, 2⅜ inch Cutter	2.40
No. 7, Jointer Plane, 22 inches long, 2⅜ inch Cutter	2.70

PATENT ADJUSTABLE BEADING, RABBET AND SLITTING PLANE.



This Plane embraces (1) Beading and Center Beading Plane; (2) Rabbet and Filletster; (3) Dado; (4) Plow; (5) Matching Plane; (6) Sash Plane; and (7) a superior Slitting Plane.

Each Plane has seven Beading Tools (⅛, 3/16, ¼, 5/16, ⅜, 7/16 and ½ inch), ten Plow and Dado Bits (⅛, 3/16, ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾ and ⅞ inch), a Slitting Blade, a Tonguing Tool and a Sash Tool.

No. 45, Nickel Plated, with 20 Tool Bits, etc., Net price each.....$6.00

ADJUSTABLE CIRCULAR PLANE.

No. 113. Adjustable Circular 1¾ inch Cutter, Net price each.....$2.25

Note.—This Plane has a flexible steel face which can be easily shaped to any required arc, either concave or convex, by turning the knob on the front of the Plane.

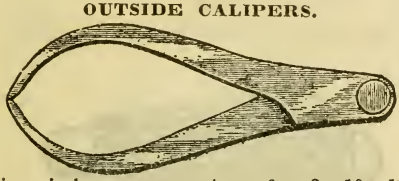
WING DIVIDERS.

Sizes, inches	6	8	10	12
Net price, each	$0.20	.25	.30	.35

INSIDE CALIPERS.

Sizes, inches	4	6	8	10	12
Net price, each	$0.12	.15	.20	.25	.30

OUTSIDE CALIPERS.



Sizes, inches	4	6	8	10	12
Net price, each	$0.12	.15	.20	.25	.30

PLAIN SCRATCH AWL.

Net price each $0.10

SOCKET SCRATCH AWL.

Net price each.
Polished Cast Steel, 6 inches long..... $0.15

COLORED LUMBER PENCILS.

Color	Net price per doz.
Black	$0.70
Red	.90
Blue	.70

BLACKSMITH'S CRAYONS.

Net price, per doz..... $0.45
Length 5 inches. Will mark Iron, Steel, Tin, etc. The mark will not burn off when the metal is used in the fire.

MALLETS.

Square.

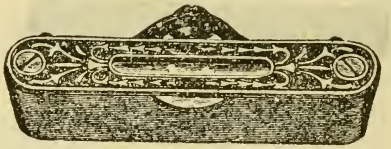
Sizes.	Net price each.
No. 9, Square Hickory, Mortised, 6½ in. long, 2¾ x 3¾ in.	$0.20
No. 12, Square Lignumvitae, Mortised, 6½ in. long, 2¾ x 3¾ in.	.35

Order by Number.

THE IDEAL MALLET.

Sizes.	Net price, each.
Iron, wood faced, weight 3 lbs.	$0.25

POCKET LEVELS.



Sizes.	Net price each.
No. 41, Iron with Brass Top Plate	$0.12

MACHINIST'S IRON LEVELS.

Sizes.	Net price each.
No. 38½, Iron Level, nickel plated, 4 in. long	$0.35
No. 39½, Iron Level, nickel plated, 6 in. long	.40

LEVELS.

No. 102.

Sizes.	Net price each.
No. 102, Arch Top Plate, 10 to 16 in.	$0.30
No. 103, Arch Top Plate, 18 to 24 in.	.40

Two side views.

PLUMBS AND LEVELS.

No. 104 and 00.

Sizes. Net price each.

No. 104, Arch Top Plate, two side views, 12 to 18 in. $0.40

No. 00, Arch Top Plate, two side views, 18 to 24 in. ..... .55

No. 3.

Net price each.

No. 3, Patent Adjustable Plumb and Level Arch Top Plate two side views, polished and tipped, 24 to 30 inches..$0.90

Style of Nos. 5 and 9.

Net price each.

No. 5, Patent Adjustable Plumb and Level, Triple Stock, Arch Top Plate, two ornamental brass tipped side views, polished and tipped, 24 to 30 inches..$1.20

No. 9, Patent Adjustable Mahogany Plumb and Level, Arch Top Plate, two ornamental brass tipped side views, polished and tipped, 24 to 30 inches..... 1.50

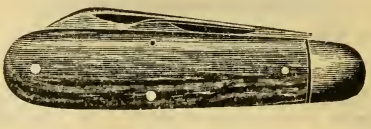
Style of Nos. 25 and 30.

Net price each.

No. 25, Patent Adjustable Plumb and Level, Mahogany, Arch Top Plate, improved duplex side views, polished and tipped, 24 to 30 inches.....$1.60

No. 30, Patent Adjustable Plumb and Level, Cherry, Arch Top Plate, improved duplex side views, polished and tipped, 24 to 30 inches..... 1.25

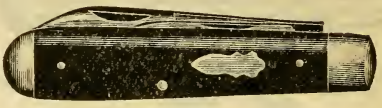
POCKET KNIVES.



No. A.

Each.

No. A—2 Blades, wood handle.....$0.25



No. B.

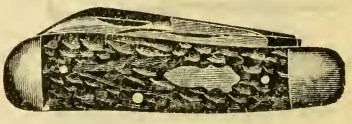
Each.

No. B—2 Blades, smooth handle.....$0.50

No. C.

Each.

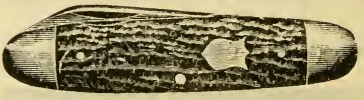
No. C—2 Blades, stag handle.....$0.50



No. D.

Each.

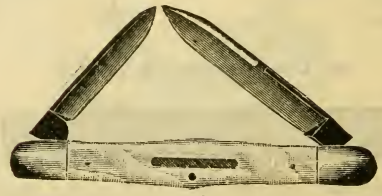
No. D—2 Blades, stag handle.....$0.75



No. E.

Each.

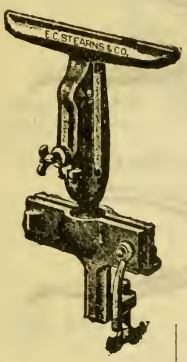
No. E—3 Blades, stag handle.....$1.00



Pearl.

2 Blades, each.....$0.95

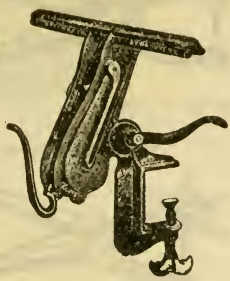
STEARNS' No. 5 SAW VISES.



Ball and socket, can hold at any angle.

Net price each.
Sizes.
No. 5, Jaw, 9½ inches ...$0.70

STEARNS' SILENT SAW VISES.

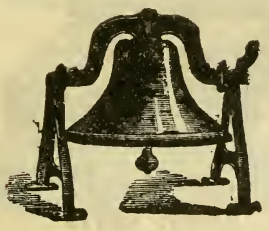


By one movement of the lever the saw is firmly clamped, after which a third jaw, faced with a solid rubber, is pressed against the saw, preventing noise and vibration; has patent ball and socket joint allowing favorable adjustment to tighten.

Sizes. Net price each.
No. 33, 10 inch planed jaws.....$0.90

FARM BELLS.

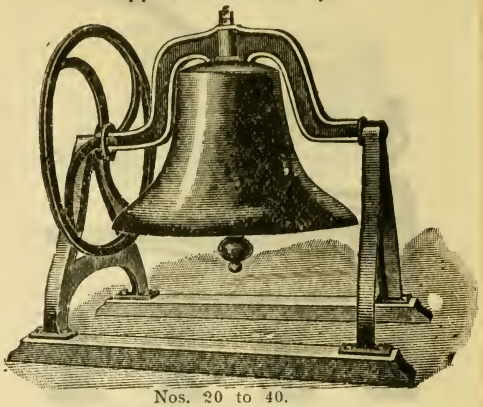
Nos. 1 to 3—FARM BELL.



No. 4—FARM BELL.

No. List.	Diameter inches.	Weight lbs.	Net price each.
1	15	40	$1.60
2	17	50	2.00
3	19	75	2.50
4	21	100	3.50

SCHOOL AND CHURCH BELLS.
Shipped from Factory.



Nos. 20 to 40.

	List No. and Diam. in inches.	Weight of Bell and mounting in lbs.	Net price each.
SCHOOL BELLS.	20	165	$ 6.65
	22	205	8.20
	24	250	10.00
	26	350	16.15
	28	450	19.00
CHURCH BELLS.	30	570	25.25
	32	640	28.50
	34	765	35.00
	36	950	42.75
	38	1,010	48.50
	40	1,300	57.00
	44	1,740	75.00
	48	2,280	95.00

Bells are numbered by the diameter in inches. The weight and prices named are for Bells and Mountings complete as illustrated on this page. All sizes of our School and Church Bells, except Nos. 20 and 22, have springs.

The superior quality of Bell Metal used in the Fredericktown Bell creates a volume of sound and purity of tone unexcelled. There is no uncertainty as to its merits. We can give no stronger proof than to call your attention to the fact that they have been in use and have given good satisfaction for over one-half a century.

Strength, durability in all climates, great volume of sound and purity of tone and the great distance at which they can be heard, is what has given the Fredericktown Bell a world-wide reputation.

All of our Bells are enameled with a rich copper bronze, which protects them from the air and weather. The hangings are wrought and cast iron, extra strong, finished with black enamel.

HALF SOLES AND TOP LIFTS.

Net price per doz. pair.
Half Soles $2.00
Top Lifts ..... .60
8 in. Howard Strips, 12 in. to 20 in. long, ...50 cents per lb.

THE HANDY RIVETER.

Net price each.

Handy Riveter with Rivets $0.40
Rivets, assorted, per box..... .08

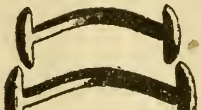
Note.—A box of 50 assorted rivets is furnished with each machine. The work is done complete with one stroke of the lever.

COPPER RIVETS AND BURRS.

Sizes.	Net price in 1 lb. boxes.
No. 8, ¼, 5/16, ⅜, ½, ¾, ⅞ and 1 in. long	$0.38
No. 10, same length as above	.38

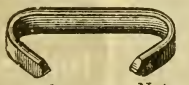
Sizes.	Net price in ½ lb. boxes.
No. 8, Assorted, ⅜ to ¾	$0.23
No. 10, Assorted, ⅜ to ¾	.23

BLAKE'S BELT STUDS.



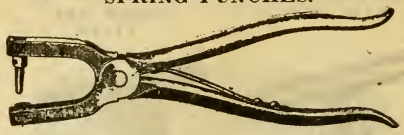
Sizes.	Net price per 100
No. 00, Length 1½ inch	$1.25
No. 0, Length 1 5/16 inch	1.00
No. 1, Length 1 inch	.85
No. 2, Length ⅞ inch	.65
No. 3, Length ¾ inch	.45
No. 4, Length 11/16 inch	.40
No. 5, Length ⅝ inch	.35
No. 6, Length ¾ inch	.30

BELT HOOKS.



	Net price per doz.		Net price per doz.
No. 12	$0.03	No. 6	$0.07
No. 11	.03	No. 5	.07
No. 10	.03	No. 4	.08
No. 9	.03	No. 3	.08
No. 8	.05	No. 2	.10
No. 7	.06	No. 1	.10

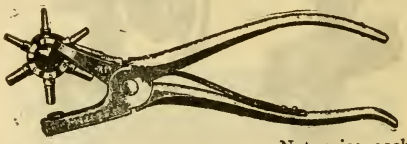
SPRING PUNCHES.



Net price each.

Spring Punches $0.35

REVOLVING PUNCHES.



Net price each.

Revolving Punches, 4 holes.....$0.45

BELT FASTENERS.

Sizes.	Net price per lb.
7/16 in. wide, 7/16 in. deep	$0.25
⅝ in. wide, ½ in. deep	.25
¾ in. wide, 11/16 in. deep	.25
1 in. wide, 13/16 in. deep	.25
1¼ in. wide, ⅞ in. deep	.25
1½ in. wide, ⅞ in. deep	.25

BEVEL CLINCH RIVETS.

Sizes.	Net price per box
Assorted ¼ to ½ inch, 100 in a box	$0.10

BABBIT METAL.

Nos. 1, 2, 3, 4 and Extra, Genuine, Palmetto.
Prices quoted on application.

SAND PAPER.

Sizes. Net price per quire.
Nos. 00, 0, ½, 1, 1½, 2, 2½, 3.....$0.20

EMERY PAPER.

Sizes. Net price per quire.
Nos. 00, 0, ½, 1, 1½.....$0.30

EMERY CLOTH.

Sizes. Net price per quire.
Nos. 00, 0, ½, 1, 1½.....$1.00

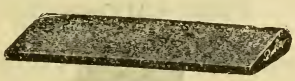
POWDERED EMERY.

Sizes. Net price per lb.
Nos. Flour, 70, 80, 90, 100.....$0.12

WASHITA OIL STONES.

Net price per lb.....$0.40

WASHITA OIL SLIPS.



Net price each.....$0.20

THE GENUINE DEERLICK OIL STONES.

Razor Edge Grit, Fast Cutting.
Sizes. Net price per lb.
Standard Size, 8 x 2 x ⅞ to 1⅛ inches..$0.35

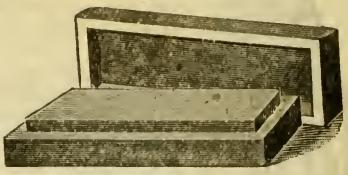
SOLID EMERY OIL STONES.

Sizes. Net price each.
8 x 2 x 1, weight about 26 ounces.....$0.35
Two grades of these stones are made; one for putting on a rough edge and one for a cutting edge on fine tools.

HINDOSTAN OIL STONES.

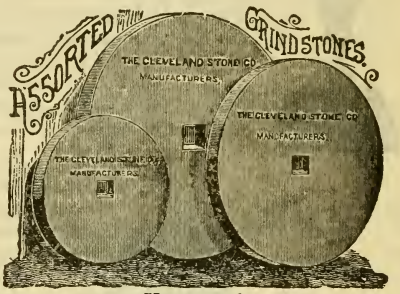
Net price per lb.....$0.10

THE DEERLICK OIL STONE MOUNTED.



Polished Mahogany Cases.
Sizes. Net price each.
6 x 2 inches $0.40
8 x 2 inches ..... .50
Handsome wood boxes.
They are more uniform in quality than other stones. They are a natural grit from American quarries, sharp and fast cutting, being equally effective whether used with oil or water only.

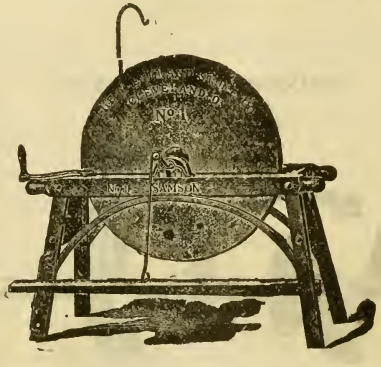
GRINDSTONES.



Unmounted.

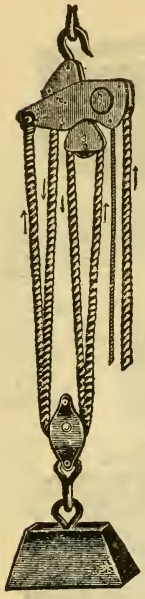
Sizes. Net price per 100 lbs.
20 in. diameter, weight about 65 lbs....$1.50
24 in. diameter, weight about 100 lbs.... 1.50
28 in. diameter, weight about 140 lbs.... 1.50
30 in. diameter, weight about 160 lbs.... 1.50

MOUNTED GRINDSTONES.



Sizes. Net price each.
Sampson No. 1.....$3.50
Sampson No. 2..... 3.35
Sampson No. 3..... 3.20

BURR STEEL SAFETY LIFT.



These lifts are automatic and adjustable, made of best selected steel. They are positve in action and sustain the load at any point. Will lock securely on wet or greasy rope. With this lift one man can easily do the work of two.

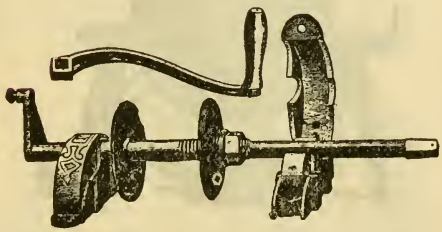
Directions.—To lower load when lower block is out of reach, grasp the hoisting rope securely before pulling on the trip rope. Hold rear end of lever down by pulling on the trip rope and allow the hoisting rope to slip back through the other hand. To lower load when lower block can be reached, pull down upon part of rope passing between block and central sheave in upper block. Easily adjusted.

No.	For Rope.	Weight.	Capacity, Pound.	Net price each.
2	¼ in.	22 oz.	600	$0.55
3	⅜ in.	4⅛ lbs.	800	.85
4	½ in.	6½ lbs.	1500	1.50
5	⅝ in.	11 lbs.	2000	1.95
6	¾ in.	17 lbs.	2500	2.40
4½	½ in.	10 lbs.	3000	2.85
5½	⅝ in.	20 lbs.	3500	3.35
6½	¾ in.	28 lbs.	5000	3.95

The above prices include lower block, BUT NO ROPE.

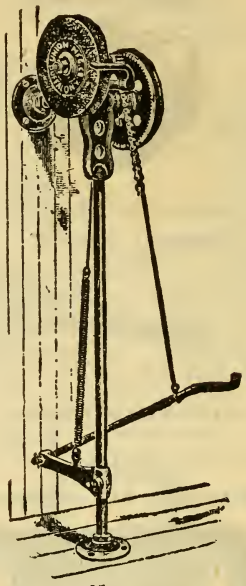
GRINDSTONE FIXTURES.

Heavy.



Length of shaft, inches	17	21
Net price per set	35c	40c

UNION GRINDER.



No. 1.

Net price each.

No. 1 Union Grinder.....$3.70

Positive Ball Clutch, Cone Bearings. For light grinding. Height 42 inches, fitted with solid emery wheel 6x¾ in., with ⅝-in. steel shaft.

UNION GRINDER.

Suitable for heavier work. Is 42 inches high, has 1 inch tubing for column with large floor base and wall bracket. Can furnish 7 inch cotton buffing wheel with balance rings at 90c each. 6 inch bull neck polishing wheel at 90c each.

No. 2. Net price each.

No. 2 Union Grinder $5.20

EMERY WHEELS.

Thickness	¼	5/16	⅜	½	⅝ in.
	Net price each.				
6 in. diam..	$0.42	$0.48	$0.48	$0.53	$0.65
8 in. diam..	.63	.70	.70	.78	.93
10 in. diam..	.90	.95	1.00	1.00	1.30
12 in. diam..	1.10	1.15	1.20	1.20	1.50
14 in. diam..	1.80	1.85	1.90	1.90	2.25

Thickness	¾	1	1¼	1½	2 in.
	Net price each.				
6 in. diam..	$0.75	$0.95	$1.10	$1.75	$2.00
8 in. diam..	1.08	1.35	1.70	2.25	2.50
10 in. diam..	1.50	1.71	2.08	2.44	3.25
12 in. diam..	1.62	2.00	2.43	2.89	3.75
14 in. diam..	2.60	2.86	3.47	4.07	4.50
16 in. diam..	3.30	4.10	4.50	5.00	6.00

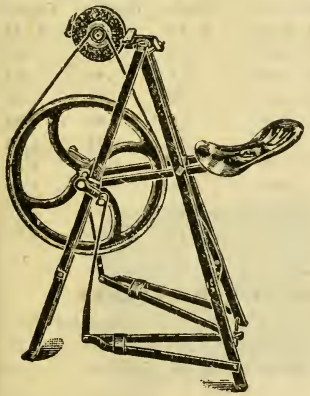
EMERY WHEEL DRESSER.

Net price each.

Huntington's 50c
Extra Cutter 12c

The best tool made for shaping and dressing Emery Wheels.

SCHOFIELD'S BI-TREADLE EMERY WHEEL.



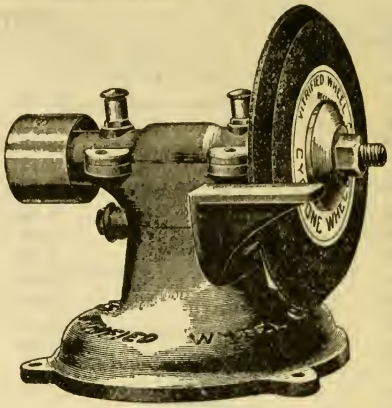
Is Warranted to Grind Faster with less Labor than any Other.

No. 2.

Best Foot Power Grinder made in America, because the entire weight and power of the operator is expended in doing the work. It is provided with Dust Proof Oil Cups, and made first-class throughout.

Net price each $6.50

A HANDY GRINDER.



Specially Adapted for Saw Gumming.

Will carry an Emery Wheel of any size up to 10 inches in diameter, 1¼ in. thick. Weight 36 pounds. Has Babbitted Bearings 8 inches long. Adjustable Side Rest. Self-feeding Oil Cups.

Net price complete.

Fitted with 10 inch Cyclone Emery Wheel for Saw Gumming $7.50

ROPE.

SISAL.

Sizes. Net price per lb.

¼ and 5/16 in. diameter.....12c
⅜ and 7/16 in. diameter.....11c
½ in. and larger 10c

MANILA.

Sizes. Net price per lb.

½ in. and larger 11c

COTTON ROPE.

Sizes. Net price per lb.

3/16 and ¼ in. diameter.....20c

HIDE ROPE.

Net price per lb.....12c

TARRED LATH ROPE.

Net price per lb.....10c

OAKUM.

Net price per lb.

Spun Oakum, best quality.....10c

MARLIN.

Net price per lb.

In pound balls 15c

WOOD SPLIT PULLEYS.

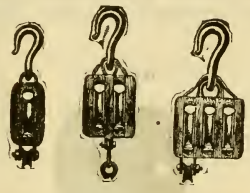
WIDTH OF FACE.

Diam. in	3	4	5	6	8	10	12	14	16
4	$1.06	$1.10	$1.18						
5	1.08	1.12	1.22	$1.29					
6	1.10	1.14	1.24	1.33					
7	1.12	1.16	1.27	1.37	$1.58				
8	1.14	1.18	1.29	1.42	1.64				
9	1.18	1.24	1.36	1.48	1.73	$1.98			
10	1.24	1.29	1.43	1.56	1.82	2.09	$2.36		
12	1.43	1.52	1.69	1.86	2.20	2.55	2.89		
14	....	1.75	....	2.17	2.58	3.00	3.42		
16	....	1.98	....	2.47	2.96	3.46	3.95		
18	....	2.20	....	2.77	3.34	3.91	4.48		
20	....	2.43	....	3.08	3.72	4.37	5.02		
22	....	2.66	....	3.38	4.10	4.83	5.55	$6.27	
24	....	2.93	....	3.76	4.70	5.43	6.27	7.11	$7.94
28	....	....	....	....	....	6.65	7.71	8.78	9.84
32	....	....	....	....	....	7.87	9.16	10.45	11.74
36	....	....	....	....	....	9.16	10.68	12.20	13.72

CAN FURNISH OTHER SIZES.

PRICES ON APPLICATION.

WOOD PULLEY BLOCKS.



Single. Double. Triple.

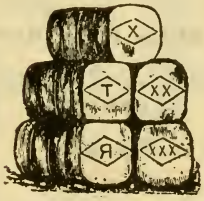
Shell.	Rope.	Net price each. Single.	Double.	Triple.
3 inch,	⅜ inch.....	$ .25	$ .40	$ .60
4 inch,	½ inch.....	.28	.50	.65
5 inch,	⅝ inch.....	.30	.55	.70
6 inch,	¾ inch.....	.35	.60	.90
7 inch,	⅞ inch.....	.40	.75	1.05
8 inch,	1 inch.....	.50	.85	1.25
10 inch,	1⅛ inch.....	.80	1.35	1.90
12 inch,	1¼ inch.....	1.35	2.25	3.00
14 inch,	1⅜ inch.....	2.10	3.00	4.00
15 inch,	1½ inch.....	2.40	3.90	5.00

STEEL PULLEY BLOCKS.

Single. Double. Triple.

Shell.	Rope.	Net price each. Single.	Double.	Triple.
3 inch,	⅜ inch.....	$ .19	$ .35	$ .48
4 inch,	½ inch.....	.23	.43	.58
5 inch,	⅝ inch.....	.24	.48	.61
6 inch,	¾ inch.....	.30	.54	.78
7 inch,	⅞ inch.....	.35	.65	.95
8 inch,	1 inch.....	.45	.77	1.15
9 inch,	1⅛ inch.....	.80	1.20	1.50
10 inch,	1¼ inch.....	1.00	1.35	1.90
12 inch,	1⅜ inch.....	1.35	2.25	3.00
14 inch,	1½ inch.....	2.10	3.00	4.00

COTTON WASTE.



Net price per lb.

White Cotton Waste.....10c

SHEAVES FOR PULLEYS.

Sizes.	Net price each.
3 inch size of block, 2¼ in. diameter....	$ .10
4 inch size of block, 2¼ in. diameter....	.10
5 inch size of block, 2¾ in. diameter....	.12
6 inch size of block, 3¼ in. diameter....	.15
7 inch size of block, 4¼ in. diameter....	.20
8 inch size of block, 5 in. diameter....	.25
10 inch size of block, 6¼ in. diameter....	.40
12 inch size of block, 7½ in. diameter....	.60
14 inch size of block, 8½ in. diameter....	.75

RUBBER HOSE.

STANDARD WATER HOSE.

Sizes.	Net price per foot.
¾ inch	$0.12
1 inch	.16
1¼ inch	.20
1½ inch	.25
2 inch	.30

EXTRA QUALITY WATER HOSE.

Sizes.	Net price per foot.
½ inch	$0.12
¾ inch	.15
1 inch	.20
1¼ inch	.25

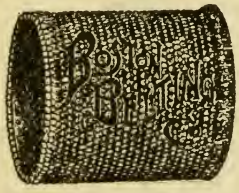
GUARANTEED WATER HOSE.

¾ inch, net price per foot.....$0.20

GENUINE STEAM HOSE.

Sizes.	Net price per foot.
¾ inch	$0.40
1 inch	.45
1¼ inch	.55
1½ inch	.65

RUBBER LINED COTTON WATER HOSE.



Sizes.	Net price per foot.
¾ inch Standard Cotton	$0.12
¾ inch Best Quality Cotton	.14

We do not carry a cheap hose which sells only because of its low price; such hose is worthless for any purpose and it is a waste of your money and our money to buy it.

ASBESTOS WICKING.

Sizes.	Net price each.
¼ lb. Balls	$0.10
½ lb. Balls	.20

ASBESTOS MILL BOARD.

Sizes.	Net price per lb.
1/16, ⅛, 3/16, ¼, 5/16 inch thick	$0.08

ASBESTOS ROUND ROPE PACKING.

Sizes.	Net price per lb.
½, ⅝, ¾ inch	$0.15

ASBESTOS BUILDING PAPER.

Net price per lb.....$0.08

CANDLE WICKING.

Net price per lb.
In Balls $0.20

CRANDALL'S RED TUBULAR MAN-HOLE PACKING.

Sizes.	Net price per lb.
⅜, ½ ⅝ inch	$0.75

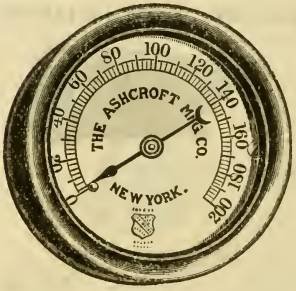
ROUND SOAPSTONE PACKING.

Sizes.	Net price per lb.
½, ¾ inch	$0.06

CRANDALL EXPANSION COIL RING PACKING.

Sizes.	Net price per lb.
⅛, 3/16, ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞ inch	$0.75

STEAM GAUGES.



Sizes.	Net price each.
200 lbs. Pressure, 5 inch Case	$1.50

GAUGE GLASSES.

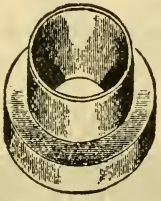
Sizes.	Net price per doz.	Sizes.	Net price per doz.
½x10 inch	$0.70	⅝x12 inch	$0.90
½x11 inch	.80	⅝x13 inch	.95
½x12 inch	.90	⅝x14 inch	1.00
½x13 inch	.95	¾x10 inch	1.00
½x14 inch	1.00	¾x12 inch	1.05
⅝x10 inch	.70	¾x14 inch	1.20
⅝x11 inch	.80	¾x16 inch	1.40

FAVORITE GLASS TUBE CUTTER.

Net price each $0.25

Note.—This simple little instrument will be found as effective in its results as any one of the Glass Tube Cutters costing five times its price.

BROOK'S MOLDED GASKETS.



For Glass Water Gauges, Indicators and Lubricators.

Sizes	½	⅝	¾
Net price per doz.	$0.60	$0.60	$0.60

RAWHIDE LACE LEATHER.

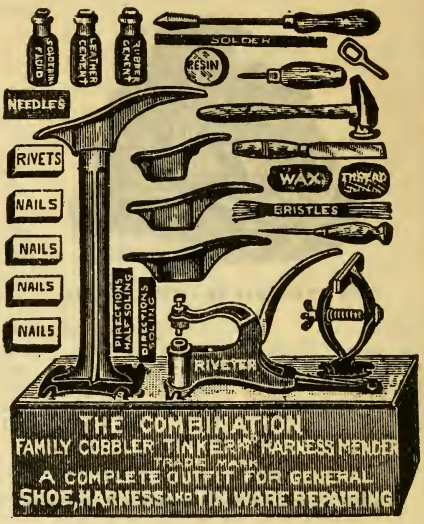
Net price per square foot $0.30

LACE CUTTERS.

Net price each.

Lace Cutter, cuts $\frac{3}{16}$ to ¾ in width.....$0.30

COMBINATION SET.



THE COMPLETE "COMBINATION" No. 2.

Family Cobbler, Tinker and Harness Mender. A complete outfit of tools, etc., for general Shoe, Harness and Tinware Repairing. Excels all other sets put up.

Net price each $1.40

CONTENTS.

1 Iron Stand for Lasts.
1 Iron Last for Men's Work.
1 Iron Last for Men's Work, extra large size.
1 Iron Last for Boys' Work.
1 Iron Last for Children's Work.
1 Shoemaker's Hammer.
1 Peg Awl.
1 Patent Peg Awl Handle.
1 Harness Awl.
1 Ball Shoe Thread.
1 Ball Shoemaker's Wax.
3 Shoemaker's Needles.
3 Harnessmaker's Needles.
1 Package ⅜ inch Half-soling Nails.
1 Package ½ inch Half-soling Nails.
1 Package ⅝ inch Half-soling Nails.
1 Bottle Leather Cement.
1 Bottle Rubber Cement.
1 Saw and Harness Vise.
1 Riveting Machine.
1 Box Rivets, assorted sizes.
1 Soldering Iron.
1 Soldering Iron Handle.
1 Bar Solder.
1 Box Resin.
1 Copy Directions for Half-soling.
1 Copy Directions for Tin Repairing.
2 Pair Heel Plates.
1 Shoemaker's Knife.

Securely Packed in Wooden Box.

GENUINE GANDY STITCHED COTTON DUCK BELT.

The rapid growth of this Belting has proven conclusively that our claim for its merits was based on a solid foundation, and all that was needed to prove its real worth was a practical test, under ordinary conditions. This test has been thoroughly made in nearly all if not in every State in the Union with the result that the "Original Gandy" has attained the highest pinnacle as a transmitter of power. Its durability and adhesive qualities we believe are unequaled, and it is not affected by atmospheric changes, Heat, Steam, Gas or Acid Fumes, its adaptation is by far greater than any other Belting known to the mechanical world.

It has a honey-comb stitching, all rows being perfectly straight, and sewn under tension from end to end, thus greatly adding to its durability. By an original device all parting or splitting of ends is obviated, hence it gives no trouble from air puffs. It has great strength, traction power and durability, and will outwear either a Leather or Rubber Belt. It is uniform in surface, runs straight and does not slip or harden. It is thoroughly stretched, leaving only the elasticity in the Duck. It is particularly adapted to damp or wet places and to where Belts are subjected to weather elements. It can be made any length without joints, thereby obviating the weakness of most other makes of Belting. In all we think it is the "King" Belt of the day. We would caution both the dealer and user of Belting alike against buying an imitation Stitched Cotton Duck Belt purporting to equal the "Gandy" and we advise all purchasers when obtaining a Stitched Cotton Duck Belt, to be sure they get the genuine and only "Original Gandy" which bears the stamp of the "Original Gandy Patented;" none are genuine without it. All Belts bearing this stamp satisfaction or money refunded.

Sizes Larger Than 6 in. 4-ply Shipped Direct from Factory.

Net Price per Foot.

4-Ply.		6-Ply.	
2 in.	$0.07	3 in.	$0.14
2½ in.	.08	3½ in.	.17
3 in.	.10	4 in.	.19
3½ in.	.12	4½ in.	.22
4 in.	.13	5 in.	.24
5 in.	.16	6 in.	.28
6 in.	.20	7 in.	.33
8 in.	.27	8 in.	.38
9 in.	.31	9 in.	.44
10 in.	.33	10 in.	.48
11 in.	.36	12 in.	.58
12 in.	.40	13 in.	.57
		14 in.	.70
		15 in.	.75
		16 in.	.81
		18 in.	.92

8-Ply.		10-Ply.	
6 in.	$0.34	12 in.	$0.92
7 in.	.40	14 in.	1.02
8 in.	.45	15 in.	1.10
9 in.	.52	16 in.	1.17
10 in.	.58	18 in.	1.35
11 in.	.63	20 in.	1.45
12 in.	.68	22 in.	1.62

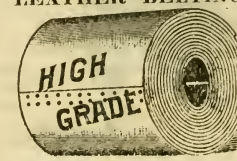
(Continued top of next column.)

GANDY BELT—Continued.

8-Ply.		10-Ply.	
14 in.	$0.90	24 in.	$1.80
15 in.	.95	26 in.	2.05
16 in.	1.00	28 in.	2.20
18 in.	1.10	30 in.	2.36
20 in.	1.20	36 in.	2.84
24 in.	1.45	40 in.	3.15
30 in.	2.00	44 in.	3.81
36 in.	2.30	48 in.	4.11
40 in.	2.55	54 in.	4.63
		60 in.	5.15

Endless Belts 3 feet extra charged for splice. And shipped direct from factory.

LEATHER BELTING.



Fully Guaranteed.

Barlow Hardware Co. Brand.

Sizes.	Net price per foot.
1 inch	$0.10
1¼ inch	.12
1½ inch	.14
2 inch	.17
2½ inch	.21
3 inch	.26
3½ inch	.29
4 inch	.35
5 inch	.42
6 inch	.49
8 inch	.65
10 inch	.82

Prices subject to change without notice.

Note.—We have the best Leather Belt only; no cheap grade.

RUBBER BELTING.

Barlow Hardware Co. Brand.

Width, in.	1	1¼	1½	2	2½
2-Ply	$0.03	0.04	0.05	0.06	.....
3-Ply	...	...	....	0.07	0.09

Width, in.	3	4	5	6	8	10	12
3-Ply	$0.10	13	...	.20	...	...	...
4-Ply	.12	.17	.20	.24	.33	.40	.47

RUBBER BELTING.

Barlow Hardware Co. Extra Brand.

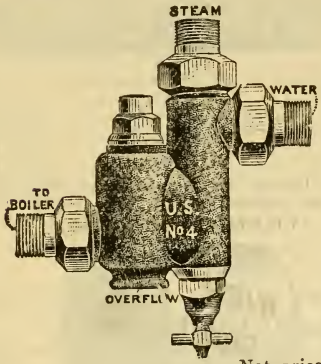
Width.	Net price per foot.
5 in. 4-ply	$0.23
6 in. 4-ply	.27
8 in. 4-ply	.34
10 in. 4-ply	.43
12 in. 4-ply	.51

Note.—All of our Belting, both Leather and Rubber, is guaranteed. We will replace every foot not giving satisfaction.

CUT BELT LACING.

	Net price per 100 ft. Bundles	Broken Bundles per foot.
⅜ in. wide	$1.15	$0.01½
½ in. wide	1.40	.02
⅝ in. wide	1.80	.02½

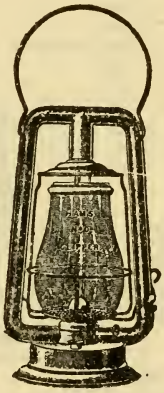
U. S. INJECTORS.



Sizes.	Net price each.
No. 2, 8 to 15 H. P.	$5.50
No. 3, 15 to 20 H. P.	6.50
No. 4, 20 to 30 H. P.	8.00
No. 5, 30 to 40 H. P.	9.00
No. 6, 40 to 60 H. P.	12.00

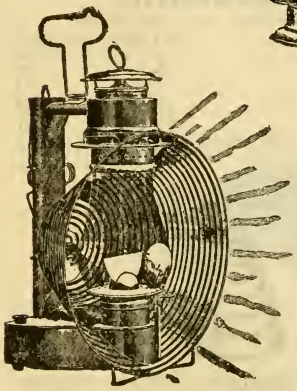
Larger and smaller sizes than above shipped direct from factory. Prices on application.

TUBULAR LANTERN.



Sizes.	Net price each.
No. 0, Tub. Lantern	$0.50
No. 2, Tub. Lantern	.75
No. 2, Cold Blast Tub. Lantern	$0.90

HAM'S SEARCH LIGHT.



No. 2 Burner, No. 0 Tubular Globe, 1 in. Wick.

Net price each $1.80

HAM'S DRIVING LAMPS.

Ham's Driving Lamp 4 in. Double Convex Lens...$2.25

TORCHES.

For Oil or Gasoline Used by Foundries, Blacksmiths and Large Establishments, Lumber Camps, Mill purposes, etc.

	Net price each. No. 1	No. 2
For Gasoline	$1.25	$1.00
For Oil	1.40	.....
Extra burners for oil	.95	.....
Extra burners for Gasoline	.85	.75

CROSS CUT SAWS.

Disston's Special Deep Gummed Extra High Thin Back Champion or Peg Tooth.

Size.	Net price each.
5 feet long	$2.40
5½ feet long	2.60
6 feet long	2.75

MOORE BROS.' CONCAVE RAZOR GROUND SAWS.

Size.	Net price each.
5½ feet long	$3.75
6 feet long	4.00

DISSTON'S ONE MAN SAWS.

Size.	Net price each.
4½ feet long	$2.00

DRAG SAWS.

Sizes.	Net price each.
No. 11, gauge 6x 8 inch, 5 feet long	$3.75
No. 11, gauge 8x10 inch, 4½ feet long	3.75
No. 11, gauge 8x10 inch, 5 feet long	4.25
No. 11, gauge 8x10 inch, 5½ feet long	4.50
No. 11, gauge 8x10 inch, 6 feet long	5.00
No. 11, gauge 10x12 inch, 5½ feet long	5.50
No. 11, gauge 10x12 inch, 6 feet long	6.00
No. 11, gauge 12x12 inch, 5½ feet long	5.50
No. 11, gauge 12x12 inch, 6 feet long	6.00

PATENT GROUND AND TEMPERED SOLID TOOTH CIRCULAR SAWS.

26 inches and larger shipped direct from factory.

EXTRA QUALITY, SUPERIOR WORKMANSHIP AND GUARANTEED AS PER WARRANTY.

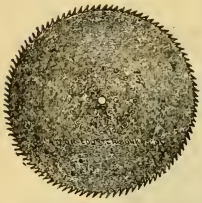
Diam. Inches.	Thickness Gauge.	Size of Hole, Inches.	Net Price Each.	Extra for Each Additional Gauge Heavier.	Price for Beveling New Saws. (Grinding or beveling old saws extra.)
6	18	¾	$ .85	.....	.....
8	18	⅞	1.20	.....	.....
10	16	1	1.80	.....	.....
12	15	1	2.25	.....	.....
14	15	1⅛	2.75	.....	.....
16	14	1⅛	3.30	.....	.....
18	13	1¼	3.75	.....	.....
20	13	1 5/16	4.50	.....	.....
22	12	1 5/16	5.50	.....	.....
24	11	1⅜	6.50	.....	.....
26	11	1⅜	7.50	$ .65	$1.05 per gauge
28	10	1½	8.50	.80	1.20 per gauge
30	10	1½	9.50	.90	1.30 per gauge
32	10	1⅝	11.00	1.00	1.40 per gauge
34	9	1⅝	12.50	1.20	1.55 per gauge
36	9	1⅝	14.00	1.40	1.70 per gauge
38	9	1⅝	15.50	1.75	1.85 per gauge
40	9	2	18.00	2.00	2.00 per gauge
42	8	2	21.00	2.50	2.20 per gauge
44	8	2	25.00	3.00	2.40 per gauge
46	8	2	30.00	3.50	2.60 per gauge
48	8	2	35.00	4.00	2.80 per gauge
50	7	2	40.00	4.50	3.00 per gauge
52	7	2	45.00	5.00	3.25 per gauge
54	7	2	50.00	6.00	3.50 per gauge
56	7	2	57.50	7.00	3.75 per gauge
58	7	2	65.00	8.00	4.05 per gauge
60	6	2	72.00	9.00	4.35 per gauge
62	6	2	80.00	10.00	4.65 per gauge
64	6	2	90.00	12.00	5.00 per gauge
66	6	2	100.00	15.00	5.75 per gauge
68	5	2	112.50	18.00	6.15 per gauge
70	5	2	127.50	21.00	6.55 per gauge
72	5	2	145.00	24.00	7.00 per gauge
74	5	2	165.00	27.00	7.50 per gauge
76	5	2	187.50	30.00	.....

No extra charge for Saws one gauge thicker than lists. Circular Saws beveled one gauge without extra charge up to 44 inches. 44 inches and larger beveled two gauges without extra charge. Circular Saws 48 inches and larger. If made thinner than 10 gauge are not warranted, and add 10 per cent. for each gauge thinner than No. 10.

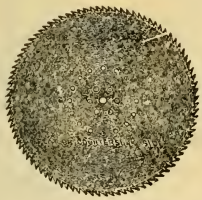
SHINGLE SAWS.

WARRANTED EXTRA CAST STEEL.

(Tapered and Patent Ground.)



LEFT-HAND.



RIGHT-HAND

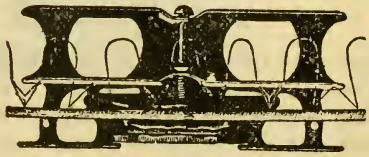
Diameter.	Net price, Each.
30 inches	$16.00
32 inches	17.50
34 inches	19.00
36 inches	21.00
38 inches	23.50
40 inches	26.50
42 inches	33.50
44 inches	36.00
46 inches	42.50
48 inches	50.00
50 inches	57.50
52 inches	67.50
54 inches	77.50
56 inches	87.50

When ordering Shingle Saws, give the following directions plainly: Diameter in inches; thickness or gauge, at center, thickness or gauge, at rim; diameter of flange, full sketch or pattern of holes, and samples of crew by which to drill and countersink saw. If you have a flange, send it to have holes drilled in saw to fit it. If you wish us to furnish flange, send full and correct sketch of diameter, thickness, holes, etc. State whose make of machine the saw is to run upon, number of teeth, flat or countersunk side, and the direction in which the teeth run. (See cut above.)

CONQUEROR SAW GAUGES.

Sizes.		Net price each.
No. 3.	Disston's for Small Circular Saws	$1.50
No. 2.	Disston's for Small Circular and Mill Saws	1.80
No. 1.	Disston's for Large Circular Saws	2.25
No. 0.	Disston's with Projecting Tongues	2.65
No. 00.	Disston's with Projecting Tongues	3.00

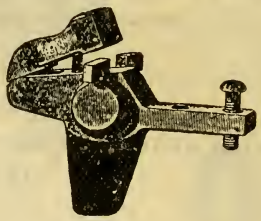
ATKIN'S EXCELSIOR SAW TOOLS.



Net price each 75c

SAW SETS.

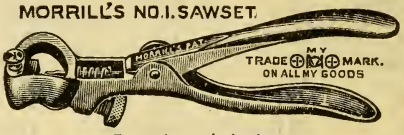
Extra Quality.



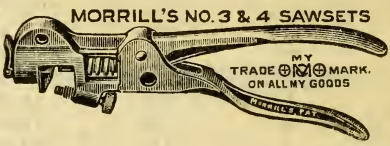
No. 5.

No. 5. Hammer Saw Set.....50c

MORRILL'S SAW SETS.



Length 6¾ inches.



Length 9 inches.

Sizes.		Net price each.
No. 1.	Morrill 7½ P. for Hand Saws	$0.40
No. 4.	Morrill's, for Cross Cut Saws	1.20

TAINTOR SAW SET.

One of the best saw sets in the market. Self adjusting except turning the anvil to change the setting.

TAINTOR'S POSITIVE NO. 7.

Net price each 70c

WHITING'S SAW SETS.

Net price each.

Whiting's, for Cross Cut Saws.....50c

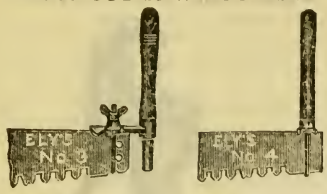
DISSTON'S SIDE FILES.

Net price each.

Side File, complete with Frame.....$1.25

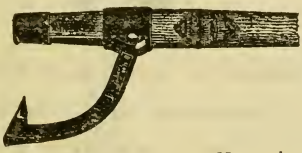
File only ..... .50

CROSS CUT SAW HANDLES.



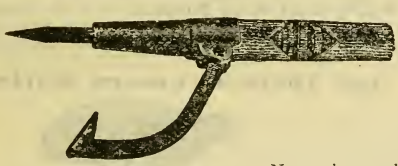
Sizes.	Net price per pair.
No. 3	$0.20
No. 4	.18

CANT HOOKS.



Net price each.
With Iron Wood Handles $1.25

SOCKET PEAVY.



Net price each.
With Iron Wood Handles..... $1.50

CANT HOOK AND PEAVY CLIPS.

Sizes.	Net price each.
2½ inch	$0.25
2¼ inch	.25
2⅝ inch	.25
2¾ inch	.25

MALLEABLE PEAVY SOCKETS.

Sizes	2¼	2⅜	2½
Net price each	$0.35	.35	.35

HANDLES.

	Net price each.	per. doz.
Axle handles, Single Bit	$0.25	$2.00
Axle Handles, Double Bit	.25	2.00
Pick Handles	.20	1.50
Mattock Handles	.20	1.50
Sledge Handles	.20	1.50
Adze Handles	.20	1.50

CANT HOOKS AND PEAVY HANDLES.

	Net price each.	per. doz.
Iron Wood, 2¼, 2⅜, 2½ inch	$0.35	$3.75

COMMON WHEELBARROWS.

Cornell steel-tray contractors' barrow; well made, well braced, and of the best material. This barrow is light and strong and not awkward or clumsy..... $4.35
Common Wood Wheel Dirt Barrows..... 1.50
Common Steel Wheel Dirt Barrows..... 1.75
Painted Steel Wheel Garden Barrows.... 3.00

STEEL SHINGLE BANDS.

Net price per lb.
Black Shingle Bands, guaranteed.....
Prices on application.
Galvanized Shingle Bands, guaranteed....
Prices on application.

ENGINE COMPOUND.

Price net per lb.
In 25-lb. pails $0.15

CHARCOAL.

Net price per bag.
In 3-bushel bags $1.00

BLACKSMITHS' COAL.

Net price per 100 lbs.
About 250 lbs. in a barrel..... $0.35
Barrels ..... .15

SUPERIOR CHIMNEY BRICK.

Net price per 100 ..... $1.00

FIRE BRICK.

Net price per 100 ..... $2.25

FIRE CLAY.

Net price per sack.
Cloth sacks about 100 lbs..... $0.50

LIME.

Net price per barrel.
White lime in lumps..... $1.10
Hydrated lime in paper sacks, each..... .25
Hydrated lime, 5 sacks to the barrel.... 1.05

CEMENT.

SAYLOR'S & UNIVERSAL.

Net price per barrel.
Portland Cement $1.40
Prices subject to market changes.

HAIR.

Net price per bushel.
Plastering Hair $0.35

STEP LADDERS.

Sizes.	Net price each.
3 foot	$0.48
4 foot	.72
5 foot	.84
6 foot	.92
7 foot	1.05
8 foot	1.15
10 foot	1.40

BAG TRUCKS.

With Stamped Steel Nose, Turned Bearings. Length 42 inches. Diameter of Wheels 6 inches. Weight 19 pounds.

Net price each.
No. 50. Bag Truck...$2.75

WIRE.

Black.

Net price per 100 lbs.
No. 6 to 9.....
Prices on application.
No. 10 .....
Prices on application.
No. 11 .....
Prices on application
No. 12 .....Prices on application
No. 13 .....Prices on application
No. 14 .....Prices on application
No. 15 .....Prices on application

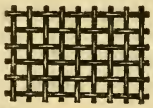
Galvanized.

Net price per 100 lbs.
No. 6 to 9.....Prices on application
No. 10 .....Prices on application
No. 11 .....Prices on application
No. 12 .....Prices on application
No. 13 .....Prices on application
No. 14 .....Prices on application
No. 15 .....Prices on application

BARBED WIRE.

Galvanized Barbed Wire.Prices on application
Galvanized Twisted Wire.Prices on application
Galvanized Staples .....Prices on application

HEAVY WIRE CLOTH.



Net price per sq. ft.
24 in. wide, 3x3 Mesh Galvanized.....5c
24 in. wide, 4x4 Mesh Galvanized.....5½c
30 in. wide, 6x6 Mesh Galvanized.....6c
36 in. wide, 4x4 Mesh Galvanized.....6c

GALVANIZED POULTRY NETTING.

Net price per roll.
12 in. wide, 2 in. Mesh.....$0.70
18 in. wide, 2 in. Mesh..... 1.05
24 in. wide, 2 in. Mesh..... 1.40
36 in. wide, 2 in. Mesh..... 2.10
48 in. wide, 2 in. Mesh..... 2.80
60 in. wide, 2 in. Mesh..... 3.50
72 in. wide, 2 in. Mesh..... 4.20
24 in. wide, 1 in. Mesh..... 3.40
30 in. wide, 1 in. Mesh..... 4.25
36 in. wide, 1 in. Mesh..... 5.10

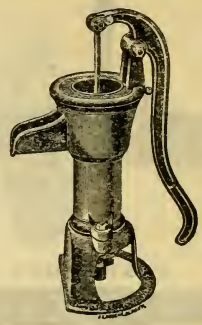
Note—Poultry Netting contains 150 running feet in roll.

STOVE PIPE WIRE.

Net price per lb.
No. 17 .....5c
No. 18 .....5c
No. 19 .....5c
No. 20 .....6c

Note—This wire is packed in stones weighing 12 lbs. each.

PITCHER SPOUT PUMPS.



Sizes	1	2	3	4
Net price each	$1.10	$1.30	$1.50	$1.75

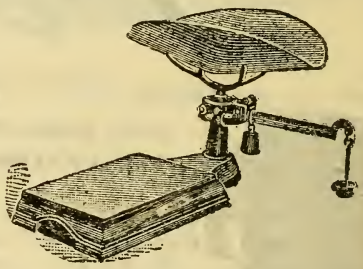
DEEP WELL IRON PUMPS.

Sizes	1	2	3	4
Net price each	$4.50	$4.75	$5.00	$5.25

WOOD PUMPS.

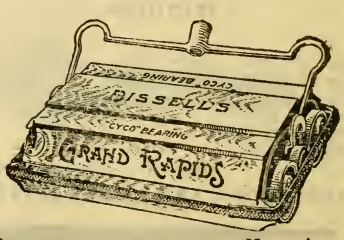
Net price each.
Common Wood Pump $3.25
Force, Lined Wood Pumps..... 4.75
Pump Log .....Net price per foot, 12c
Pump Couplings .....Net price each, 40c

THE AMERICAN GROCER SCALES.



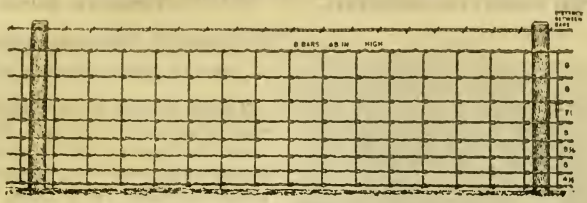
Brass Scoop, Brass Beam, Brass Sliding Weight, Case Hardened Steel Points. Furnished in red with gold stripes. A reliable scale worth a dozen of the cheap scales.
Weight ½ oz. to 240 lbs. each.
Packed one in a box.....$5.00

CARPET SWEEPERS.



Kinds. Net price each.
Bissell's Grand Rapids.....$2.50
Bissell's Ideal 3.25
Bissell's American Queen..... 3.50
Bissell's Elite 3.75

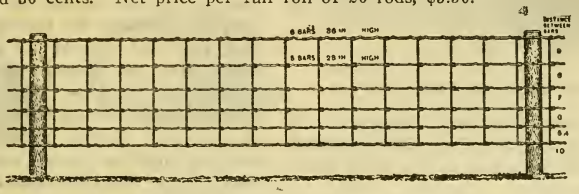
AMERICAN FENCE.



SPECIAL FARM FENCE, WITH BARBED WIRE.

Good and inexpensive design for cattle, horses and sheep. By using one or more lines of barbed or plain wire will make a fence that will be high enough to turn all animals.

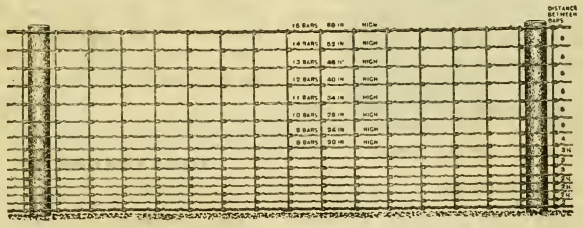
SPECIFICATIONS—Design No. 845, Bars 8. Height in inches, 45. Stays, 12 inches apart. Net price per rod 30 cents. Net price per full roll of 20 rods, $5.50.



SPECIAL SHEEP AND HORSE FENCE.

The height of the fence is subject to variation by distance placed from ground. It is constructed for the purpose of providing an efficient fence at lowest cost, where no necessity exists for a pig-tight fence. We show the fence placed 10 inches above the ground surface at the lowest extremity, bringing top bar 45 inches above ground surface.

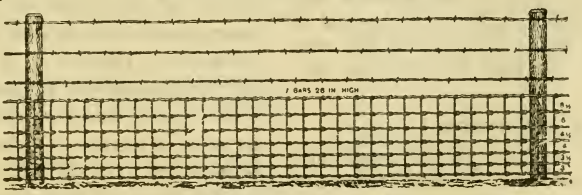
SPECIFICATIONS—Design No. 635. Bars 12. Height in inches 35. Stays 12 inches apart. Net Price per rod, 25 cents; Net Price per full roll of 20 rods, $4.50.



No. 1452.

POULTRY AND RABBIT FENCE.

LIGHT SPECIFICATIONS—Top and Bottom Bars, No. 10 Wire. Intermediate Bars, No. 12 Wire. Stays, No. 13 Wire. Stays 6 inches apart. 14 Bars high. 52 inches high. Net Price 50 cents per rod; Net Price per full roll of 20 rods, $9.00.



26-in. HOG FENCE.

Net Price per rod 25 cents. Net Price per full roll of 20 rods $4.50

Design No. 726. Bars 7. Height in inches 26. Stays 12 inches apart.

More miles of this fence are used on American farms than of all other styles of wire fence combined. With the barbed wire above, it makes a fine stock fence. The illustration shows stays six inches apart, and with this close mesh is the most efficient hog fence. QUALITY—From the beginning we have aimed to furnish a quality of steel in manufacturing American fence, the best that could be produced for the purpose and services indicated. We have from time to time made improvements in the quality, temper and composition of our steel fence wire, and have recently made a further stride in this direction which we are satisfied, will prove by far, the most important and satisfactory advancement ever made in the manufacture of wire fencing.

PERFECTED GRANITE ROOFING.

Is Easy to Lay.

Perfected Granite Roofing is shipped to the consumer ready for immediate use, requiring neither repainting, coating, or any other treatment before laying.

Anyone who can handle a hammer and drive a nail properly can lay Perfected Granite Roofing as it should be laid by following the plainly given, simple directions which accompany each roll.

Is made of a fibrous composition that is practically fire proof, which is evenly covered with white pebbles of uniform size by especially designed machines.

The material used being incombustible, the finish product will not burn, it will only char after being subjected to long continued intense heat, or contact with vigorous flames.

It is Durable.

Perfected Granite Roofing outlasts all other composition and metal roofings. It does not rust like tin, rot like shingles, nor crack like slate. Under all the varying conditions of the four seasons, it stands impervious. You run no risk in covering your buildings with this roofing. It has stood the test of time and is holding its old friends while making new ones rapidly. Have you tried it? Send for samples.

It is Waterproof.

Against the heaviest rain or penetrating, melting snows of winter, Perfected Granite is an absolute protection. Properly laid, it is like one unbroken covering over the roof, shedding water rapidly and drying quickly. It wears longer than other composition roofings because it is chemically prepared to resist the effect of the weather, and heat, gases and fumes. These qualities have made Perfected Granite Roofing the standard roofing of America.

Net price per square.....$2.75

TISBEST ROOFING.

An improved high-grade prepared Roofing of superior tensile strength and durability.

Tisbest Roofing is constructed of high grade wool-felt, very strong and long fibred, saturated thoroughly with a waterproofing compound which will not evaporate. The finished fabric is pliable, very tough and strong and absolutely waterproof.

At the time of manufacture Tisbest is thoroughly coated with a protective composition on both sides. On the upper side the coating is used of course to add to the weatherproof qualities to enable the roofing to resist the actual wear and tear of the weather. On the under side the coating protects the roofing against the attack of steam or other fumes from inside the building. The protective qualities of this coating exceed those of sand dressing, and the coating will be found much longer lived than the ordinary paint used on other roofings.

Tisbest Roofing is adapted to any style of architecture, being suitable either to steep or flat roofs. It can be laid over shingle roof without stripping of the shingles, as its tensile strength is sufficient to enable it to resist puncture by the roughness of the foundation. Likewise it is applicable over tin roofs or other roofings where it is desirable to avoid the expense of removing the old covering.

ADVANTAGES OF TISBEST.

First.—Tisbest is absolutely weatherproof. By this we mean that winter snows piled thickly and heavily upon it will find no weak spot in it and will not cause decay or wet-rot. Hot weather will not soften it, as it contains no gummy materials to ooze out and flow towards the gutters. Likewise it is not affected by cold temperatures and will not crack or stiffen in the severest cold snap. Zero weather will not shrink it or cause it to lose in the slightest its flexibility. On the other hand, when exposed to continuous heat of 120 degrees for ten months, the fabric did not lose in weight and remained flexible and pliable. In other words there is no heat, even in the tropics (where it has considerable sale), which is too severe for Tisbest.

See next page.

BARLOW RUBBER ROOFING.

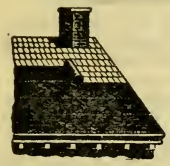
One ply weighing complete about 35 pounds per 108 foot roll.

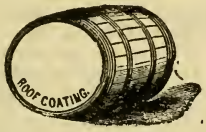
Two ply weighing complete about 42 pounds per 108 foot roll.

Put up in rolls containing one square (108 square feet) including caps, nails and cement in sufficient quantities.

One ply .....Net price per square $1.50
Two ply .....Net price per square 2.25

BLACK DIAMOND TARRED FELT ROOFING.





Two Ply .....per square, $.75
Three Ply .....per square, .95
Coating for Roofing.....per gallon, .20
Coating in half bbls.....per gallon, .17
Coating in bbls.....per gallon, .15
Tin Caps for Roofing.....per pound, .06
Nails for Roofing.....per pound, .05
5 cents less per roll in 25 roll lots.

A READY ROOFING WITH A REAL RECORD.

Black Diamond has satisfactorily served in all climates and weather for 30 years. It was the first ready roofing made, it is still the best, carefully put together in convenient form to handle, making a strong, durable weather-proof covering.

BUILDING PAPERS.

Stringed Felt, (500 sq. ft. in a roll) .....Price per roll, $1.40
Red Rosin, Sized, (500 sq. ft. in a roll), No. C.....per roll, .50
Heavy Rosin, Sized, (500 sq. ft. in a roll), No. 8.....per roll, 1.00
Buckskin, (500 sq. ft. in a roll)..... .90
Carpet Felt .....per yard, .03

SEWER PIPE AND FITTINGS.

Sizes 3 to 24 inches. Prices on application.

GALVANIZED BARBED WIRE.

You Can Always Buy Barbed Wire Cheaper from Us Than Any Other Place.

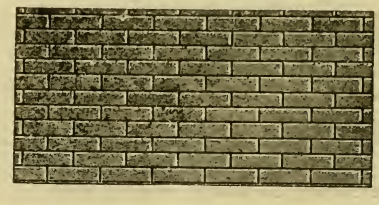
GET OUR PRICES.
ON

SCREEN DOORS—WINDOW SCREENS—
BLACK SCREEN WIRE CLOTH.

Width—24, 26, 28, 30, 32, 34 and 36 inches.
Net price per square foot.....1¾c

PRESSED STEEL BRICK SIDING.

Shipped from Factory.



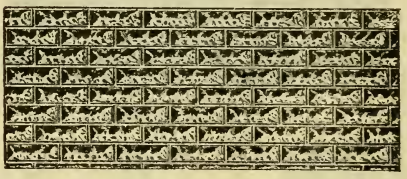
PAINTED OR GALVANIZED.

Painted .....Net price per square, $2.13
Galvanized .....Net price per square, 3.60

Sheet Metal Siding lately placed on the market, is an excellent imitation of brick. On a building it is the counterpart of finely finished brick, making the most attractive and handsome sheet metal covering yet produced or offered the building trade. It makes an elegant facing for stone fronts and certainly takes the place of the old galvanized iron fronts, because it is cheaper, makes a handsomer front and is more easily applied.

ROCK FACE BRICK SIDING.

Shipped from Factory.



PAINTED OR GALVANIZED.

Painted .....Net price per square, $2.25
Galvanized .....Net price per square, 3.70

Size of single brick, 2 4-5x8¼ inches. Sheets 60x28 inches. Its low price commends it to all. Architects, Builders and Contractors will readily see the advantages of using these patterns for side coverings on all buildings, in preference to the old style corrugated, beaded and other metal sidings. Used extensively for side covering on business blocks, dwellings, school houses, factories, etc.

ROCK FACE STONE SIDING.

No. 1.

Painted .....Net price per square, $2.25
Galvanized .....Net price per square, 3.70
Size of single stone, 7x12 inches.
Sheets, 60x28 inches.

ROCK FACE STONE SIDING.

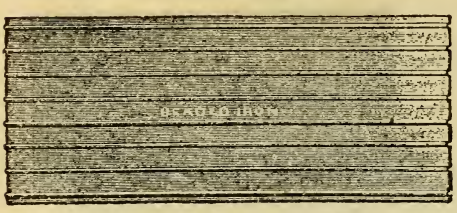
No. 2.

Painted .....Net price per square, $2.25
Galvanized .....Net price per square, 3.70

Size of single stone, 9⅓x20 inches. Sheets, 60x28 inches. A square of Rock Face Brick or Stone consists of eight and four-sevenths sheets 60 inches long by 28 inches wide. In ordering Plain or Rock Face Siding, allow four to six square feet to the hundred for laps.

Shipped from factory.

BEADED SIDING AND CEILING.

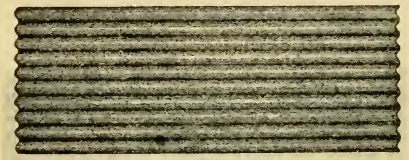


PAINTED OR GALVANIZED.

Net price per square.
Painted, 28 gauge.....$2.25
Galvanized, 28 gauge 3.80

Each sheet covers 27 inches from center to center of outside bead. In laying this, lap the end of the sheet one inch, and one bead on the side of the sheet. Nail side laps three inches, and end laps close to every bead. The beads are three inches apart. In ordering state length of sheets wanted.

CORRUGATED SHEETS.



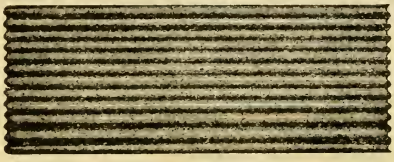
2½ inch Corrugation.

PAINTED OR GALVANIZED.

Net price per square.
Painted, 28 gauge $2.00
Galvanized, 28 gauge 3.50

Corrugations measuring two and one-half inches from center to center and five-eighths inch deep. Regular lengths 6, 7, 8, 9 and 10 feet by 26 inches wide and made from No. 14 gauge material and lighter. This style and size of corrugation is more largely used than any other kind for roofing purposes. Covering width about 24 inches.

CORRUGATED SHEETS.



⅝ and 1¼ inch Corrugated.

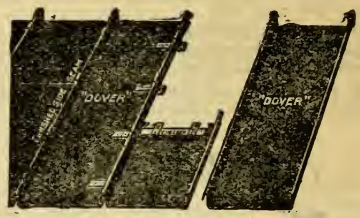
PAINTED OR GALVANIZED.

Net price per square.
Painted, 28 gauge.....$2.10
Galvanized, 28 gauge 3.65

Regular lengths 6, 7, 8, 9 and 10 feet by 26 inches wide, and is made from 20 gauge and lighter. This style is used for roofing, siding, ceiling and partitions. Covering width about 24 inches.

PRESSED STANDING SEAM ROOFING.

28 Gauge.

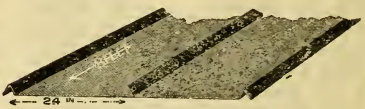


Net price per square.
Pressed Standing Seam Painted.....$2.10
Pressed Standing Seam Galvanized..... 3.75

With cleats, add 10c per square.

Is furnished in sheets with plain ends in lengths of 6, 7, 8, 9 and 10 feet. Made in all gauges. No. 24 and lighter. This has a cap on one side and a one inch flange on the other. It is a good style for steep roofs, as there are no edges to be turned up by workmen.

V CRIMPED STEEL ROOFING.



PAINTED OR GALVANIZED.

Net price per square.
Painted, no sticks, 28 gauge.....$2.00
Galvanized, no sticks, 28 gauge..... 3.55

With sticks, add 10c per square.

This will lay 24 inches wide, as they are 24 inches from center to center of crimp. Lengths 6, 7, 8, 9 and 10 feet. It is made from 28 to 18 gauge. This makes a cheap, durable fireproof roofing and siding, used largely for covering rolling mills, saw mills, cotton sheds, barns, etc. It can be laid upon sheeting boards, puntins, or direct to rafters.

THREE CRIMP ROOFING.

PAINTED OR GALVANIZED.

Net price per square
Painted, no sticks, 28 gauge.....$2.10
Galvanized, no sticks, 28 gauge..... 3.65

With side sticks add 10c per square.

With side and center sticks add 20c per square.

Lengths 6, 7, 8, 9 and 10 feet. The crimps are one foot apart and represent barn board siding. The sheets lay two feet wide by full length of the sheet less one inch lap on end of sheet.

Notice—All Prices on this Page are Subject to Market Changes.

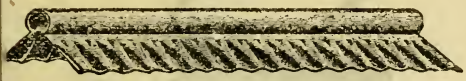
VALLEYS AND ROOF GUTTERS.

This Valley and Gutter is made from Terne 25 pound coated plate in any desired length; locked and soldered on one side and painted red on both sides with pure linseed oil and metallic ore.

Width	10	14	20	28 in.
Net price per foot	6	8	12	17c

CORRUGATED ROLL RIDGING.

Shipped from Factory.

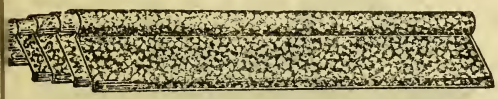


Net price per foot.

No. 28 Gauge, painted	7½c
No. 28 Gauge, Galvanized	9 c

Is the most perfect article on the market, and an absolute protection against storms blowing under. It is made with 2½ and 1¼ inch corrugations. In ordering state the kind wanted.

ROUND RIDGE CAP.



Diameter. of roll.	Girt.	Net price per foot. Painted.	Galvanized.
1¼ in.	7 in.	3 c	3½c
1½ in.	8 in.	3½c	4 c
2 in.	10 in.	4½c	5 c
2½ in.	12 in.	5½c	6 c
3 in.	14 in.	6½c	7 c

GALVANIZED SLIP JOINT EAVE TROUGH MITRES.

SINGLE BEAD.

Sizes	3½	4	4½	5	6 in.
Net price each	22	25	26	26	30c

DOUBLE BEAD.

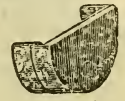
Sizes	3½	4	4½	5	6 in.
Net price each	27	30	30	33	37c

GALVANIZED END PIECES AND OUTLET.

Single or Double Bead.

Sizes	3½	4	4½	5	6 in.
Net price each S. B.	20	22	25	25	30c
Net price each D. B.	23	25	27	27	32c

GALVANIZED SLIP JOINT END CAP.



Sizes	3½	4	4½	5	6 in.
Net price each S. B.	8	9	10	11	12c
Net price each D. B.	8	9	10	11	12c

CORRUGATED ROUND GALVANIZED ELBOWS AND SHOES.

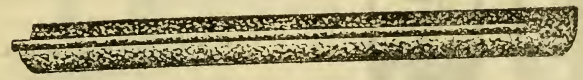
ELBOW

SHOE

Sizes	2	3	4	5	6 in.
Price Elbows	8	10	12	15	20c
Price Shoes	8	10	12	15	20c

GALVANIZED SLIP JOINT EAVE TROUGH.

Best Quality—No Culls.



SLIP JOINT SINGLE BEAD.

Sizes	3½	4	4½	5	6 in.
Net price per foot	4½	5	5½	6	7c

4 in. and larger shipped direct.

SLIP JOINT DOUBLE BEAD.

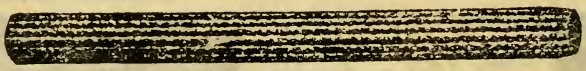
Sizes	3½	4	4½	5	6 in.
Net price per foot	5	6	6½	7	8c

3½ and 4½ Double Bead shipped direct.

No soldering required. Half the labor saved. Not affected by contraction or expansion. Much stronger than soldered trough. Does not get out of order. Right hand and left hand in Single Bead.

Notice.—All Prices on this Page are Subject to Market Changes.

BOUND GALVANIZED CORRUGATED CONDUCTOR PIPE.



CONDUCTOR PIPE.

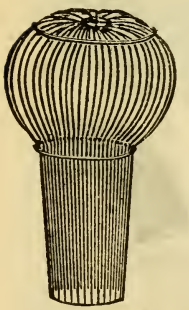
Sizes	2	3	4	5	6 in.
Net price per foot	3¾	4½	6	7½	10c

Made in 10 foot lengths only. Much stronger and more durable than pieced conductor. Is not affected by expansion or contraction.

RAIN WATER CUT OFF.

Sizes	2	3	4	5	6 in.
Net price each	.30	.35	.49	.88	$1.05

The cheapest and best Cut-off ever introduced. Automatic, durable and simple. The only absolute self-locking automatic cut-off in the market.



GALVANIZED WIRE CONDUCTOR STRAINERS.

Sizes.	2	3	4	5	6 in.
Net price each.	6	8	11	14	18c

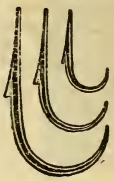
Invaluable for keeping leaves and similar obstructions out of conductor pipe.

RED IRON ORE ROOF PAINT.

Sizes.	Net price per gallon.
One Gallon Cans	80c
Five Gallon Cans	70c
Half Barrels	70c
Full barrels	60c

One gallon will cover from 400 to 600 square feet one coat. Owing to its heavy body, adhesiveness and elasticity, it is far the best paint in the market for iron, tin and wood painting.

TINNED CONDUCTOR HOOKS.



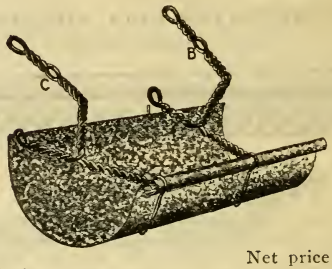
For Wood.

Sizes	2	3	4	5	6 in.
Net price ea.	2	3	4	5½	6½c

Heavily tinned.

EAVE TROUGH HANGERS.

Single Bead.



Sizes.	Net price doz.
3½ inch	20c
4 inch	20c
4½ inch	25c
5 inch	30c
6 inch	35c

This hanger is made of the best galvanized steel wire. Easily applied—cannot get out of place.

SHEET IRON.

BLACK.

Ga.	Width.	Length.	Net price per 100 lbs.
No.	14x24x96	in	$3.00
No.	16x24x96	in	3.05
No.	18x24x96	in	3.10
No.	20x24x96	in	3.10
No.	22x24x96	in	3.15
No.	24x24x96	in	3.15
No.	26x24x96	in	3.25
No.	28x24x96	in	3.25

GALVANIZED.

Ga.	Width.	Length.	Net price per 100 lbs.
No.	16x30x96	in	$4.00
No.	18x30x96	in	4.00
No.	20x30x96	in	4.00
No.	22x30x96	in	4.25
No.	24x30x96	in	4.25
No.	26x30x96	in	4.50
No.	28x30x96	in	5.00

Notice—All Prices on this Page are Subject to Market Changes.

PONY FEED CUTTER.

Well Made, Light Running, Nicely Balanced.

A hand cutter with one knife, of simple design, for cutting hay, straw and corn stalks, and is adapted to the requirements of parties feeding one to five or six animals. It is strong, light running and nicely balanced, which makes it run steady when turning fast. Lengths of cut, ½, 1, 1½, and 2 inches. Weight knocked down and packed for shipment, 165 pounds.

Net price each.

No. 11¼. One Knife 11¼ in. long.....$9.00

OHIO HAND FEED CUTTER.

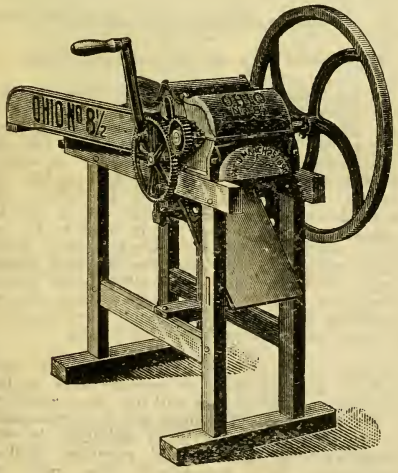


Fig. 779—No. 8½.

Solidly Constructed, Nicely Finished, Light Running.

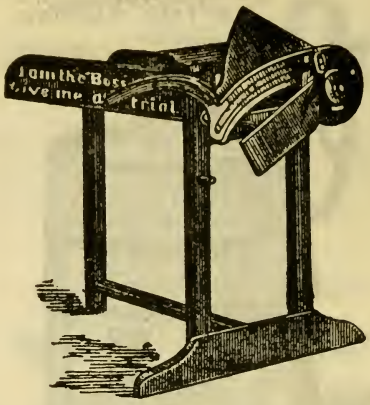
Two-knife machines are sent when not otherwise specified.

Weight, 165 lbs.

Two Knives. Length of knives 8½ in.

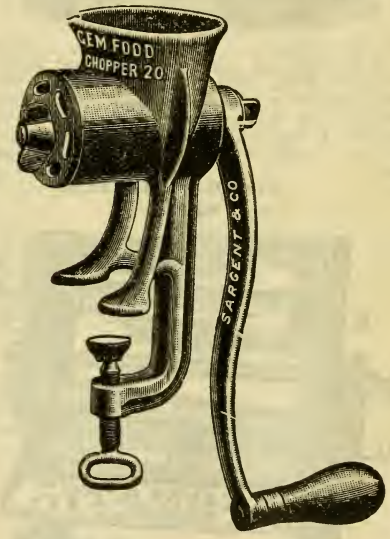
No. 8½, each.....$12.50

FEED CUTTER.



Net price each $2.50

CLEARCUT FOOD CHOPPER.



Sizes. Net price each.

No. 200 .....$1.25

No. 300 ..... 1.50

Nicely tinned—will not rust.

It chops—does not tear, smash, squeeze, grind.

It chops meat, both raw and cooked.

It chops fruits, vegetables and all other food.

It is easy to operate.

It is easy to adjust.

It is easy to clean.

It is easy to take apart and put together.

There are few parts.

Nothing to get out of order.

It has cutters for cutting in pieces of various sizes.

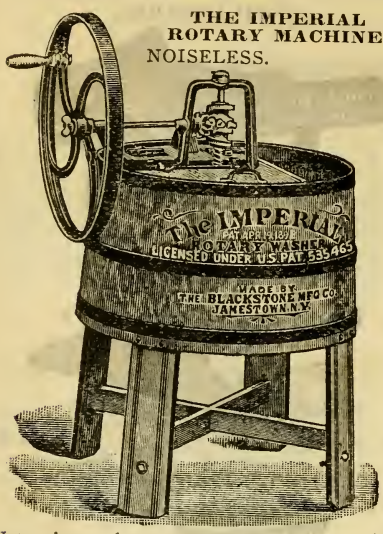
The cutters are made of steel; they cannot break.

The cutters are self-sharpening.

Four sizes of choppers are made.

THE IMPERIAL ROTARY MACHINE.

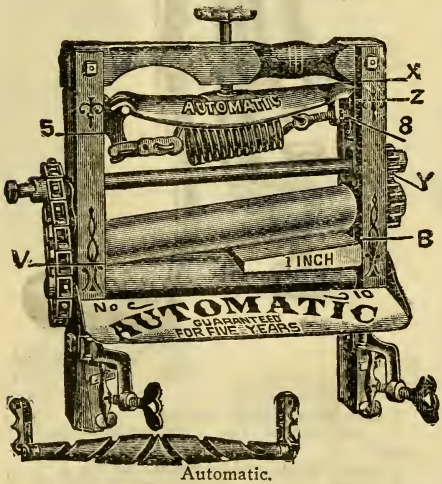
NOISELESS.



Net price each $6.50

Runs with less noise than any other Rotary Washer on the market. It is built with sliding cylinder on square post, insuring the greatest strength of any Rotary Gearing yet produced. It has roller bearings, thereby making it, when loaded with clothes, practically noiseless.

CLOTHES RINGERS.



Automatic.

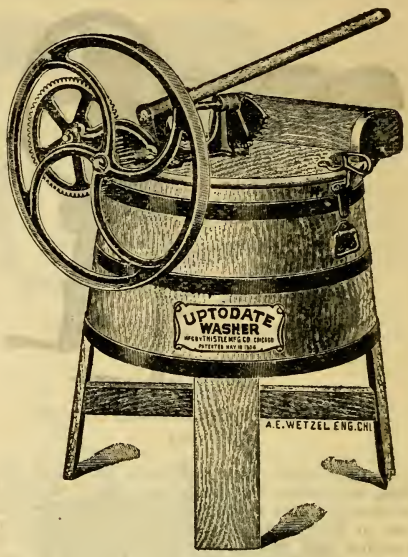
THE AUTOMATIC WRINGER IS THE BEST WRINGER MADE.

Net price each $4.00

These Wringers are guaranteed by us for five years from date of purchase. If for family use any part breaks or wears out during that time we will replace such part *free of cost*.

	Net price each.
Grand	$2.25
Bicycles Wringer	3.50
Easy Wringers	3.00

UP-TO-DATE WASHING MACHINE.



Net price each.....$9.50

The Up-to-date Washer will wash quickly, thoroughly and without tiring the operator or injury to the clothes.

It has a rotary motion without the turning of a crank.

A continuous motion without constant exertion.

High speed with the least possible effort.

It combines a flywheel with the lever motion. The lever being operated in the most natural way (*a downward thrust*) does not tire the operator, but gives great momentum to the flywheel, which then does the work. A downward thrust of the lever puts the machine in motion; it is not necessary to follow the lever down to its lowest point, but it can be released and no further effort need to be exerted until it starts downward again. With every motion of the lever the flywheel makes seven revolutions and the Dasher turns almost completely around. The Dasher starts slowly, gradually increases in speed and then comes to an easy stop before beginning again.

There is no jerking in its movements right and left and therefore no unusual wear on the machine and the clothes will not wear and tear in the washing. This right and left movement of the Dasher causes great agitation in the water and the dirtiest and greasiest clothes are cleaned in a surprisingly short space of time.

The Up-to-date Washer is built to wear and is solid and substantial. The few metal parts are simple, strong and not liable to get out of order. All parts are, however, interchangeable and should they be broken by accident or misuse can be replaced at slight expense.

MALLEABLE IRON RAKES.

Sizes	10	12	14 teeth
Net price each	$0.15	.20	.25

STEEL RAKES.

Full Polished. Straight Pattern.

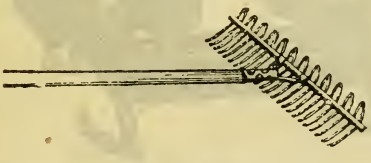
Sizes	12	14	16 teeth
Net price each	$0.40	.45	.50

SOLID BOW RAKES.

Polished Steel, Tempered.

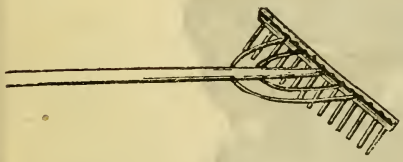
Sizes	10	12	14	16 teeth
Net price each.....	$0.40	.45	.50	.55

WIRE LAWN RAKES.



All Steel, Tinned, with Handles.
Teeth, net price each.....50c

WOOD RAKES.



Common.	Premium.	Eagle.
$0.15	$0.25	$0.30

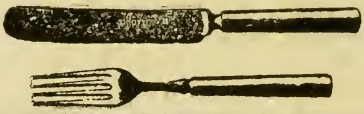
BROOKS' CORN KNIVES.

Net price each 30c

ROGERS SILVER SPOONS.

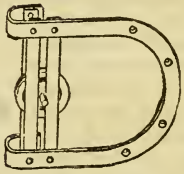
Rogers Triple Plated Tipped Pattern.
Tea Tipped Pattern, Net price per set of Six $1.00
Dessert Tipped Pattern, Net price per set of Six 2.00
Table Tipped Pattern, Net price per set of Six 2.25

ROGERS SILVER KNIVES AND FORKS.

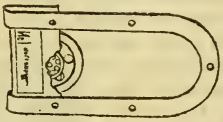


No. 12 Rogers Triple Plated Square Handle. Net price per set of 12 pieces —6 knives and 6 forks.....$3.25

LANE'S STEEL BARN DOOR HANGERS.



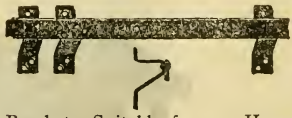
Nos. 1 and 1½.
Anti-Friction Rollers.



No. 30.
Covered Roller Bearings.

Sizes.	Net price per pair
No. 1 runs 5 feet.....	70c
No. 1½ runs 10 feet.....	80c
No. 30 runs any length.....	60c

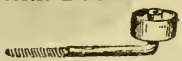
O. N. T. TRACK.



With Brackets, Suitable for any Hanger.
In lengths of 4, 5, 6, 8, 10 feet.

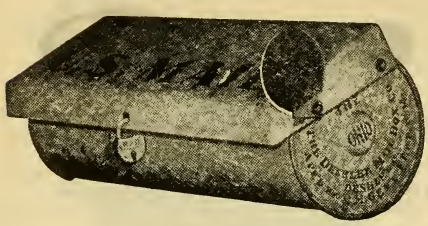
	Net price per foot.
No screws	3½c
With screws	4c

BARN DOOR STAY.



No. 7.
To Screw.
Net price each 10c

R. F. D. MAIL BOX.



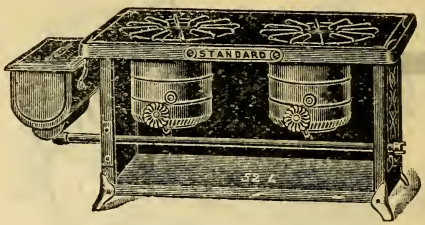
Net price each 75c

The kind the Postoffice Department especially recommends. See order of Postmaster General, No. 739.

Approved by Postmaster General, February 9, 1904, Re-approved by Special Examiners, March 9, 1907.

The Ohio is made of honest material throughout; lid is made of 20 gauge Galvanized steel (very heavy) and body of 22 gauge Galvanized steel, thoroughly reinforced by a ⅝ bead in front and back of opening, keeping the box in shape and making it storm proof as the cover fits snugly against the bead. No other box has this feature. Has automatic signal painted *red* and poised above the box, making it easily seen by the carrier; lid cannot blow open or freeze shut, nor can it be left open by mistake, as it is self-closing. The body of the box being round, pennies or mail can be removed with gloves or mittens on, and there are no cracks in it around the edges, as in the square boxes, for postal cards or change to lodge in, but both mail and change are always in plain sight of the carrier. The box can be fastened to a post, tree or any convenient object.

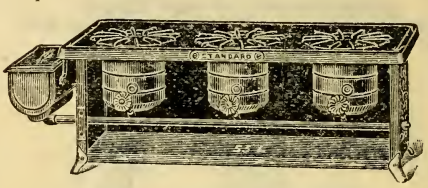
WICKLESS BLUE FLAME OIL STOVES.



No. 52R.

Net price each.

Top 23x14 inches. Height 12½ inches...$4.00

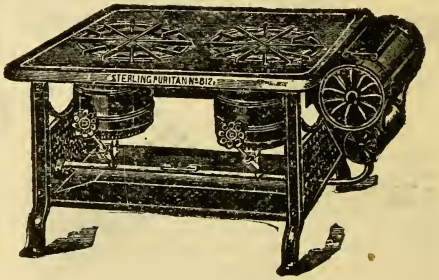


No. 53R.

Net price each.

Top 33x14 inches. Height, 12½ inches...$5.00

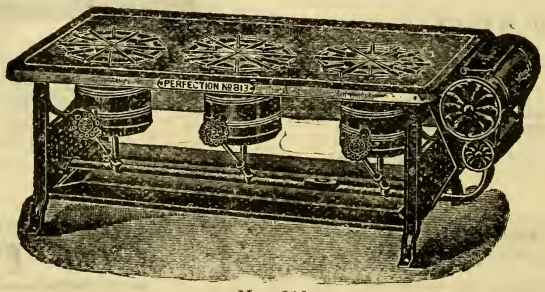
These stoves have powerful 3½ inch burners and are easy to operate and understand. They produce an intensely hot smokeless blue flame.



No. 812.

Net price each.

Top 14x32 inches. Height, 12½ inches...$5.00



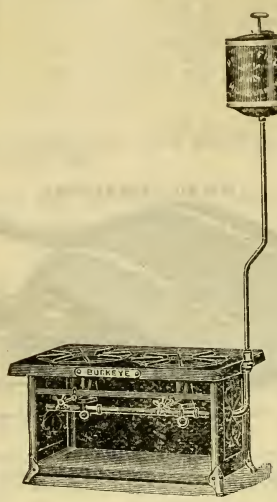
No. 813.

Net price each.

No. 813. Size Top 14x32 inches. Height 12½ inches $6.50

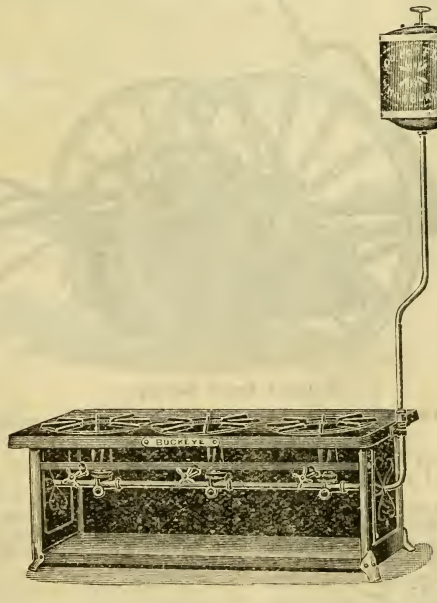
GASOLINE STOVES.

Shipped from factory.



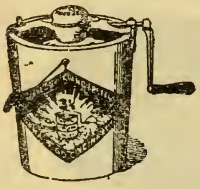
No. 2-H BUCKEYE JUNIOR. TWO BURNER. WEIGHT, 28½ LBS.

Top.	Height.	Net price
14 x 22 in.	12 in.	$3.50



No. 3-H BUCKEYE JUNIOR. THREE BURNER. WEIGHT, 31½ LBS.

Top.	Height.	Net price
14 x 32 in.	12 in.	$5.00

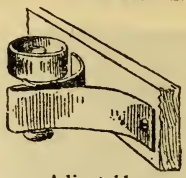


ALASKA FREEZERS.

A simple, perfect working freezer. The dasher is made on scientific principles. Mixes the cream thoroughly. Easily cleaned and does not get out of order.

Sizes	2	3	4	6	8	10	12 qt.
Net price ea.	1.85	2.25	2.75	3.25	4.00	5.00	6.00

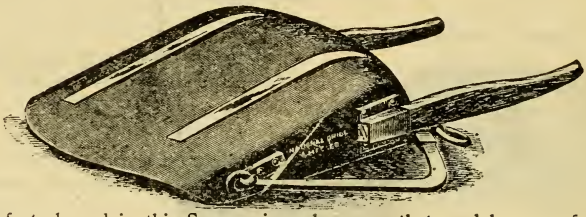
LANE'S STAY ROLLERS.



Adjustable. Net price each.

Adjustable, Japanned, made of Steel, except Wheels 15c

DRAG SCRAPERS.



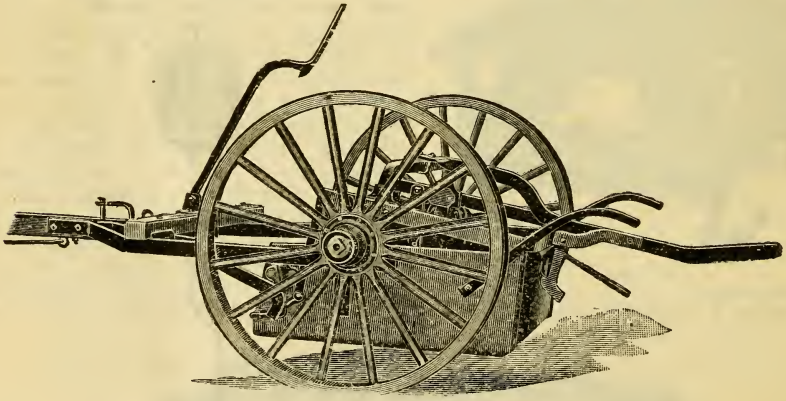
The gauge of steel used in this Scraper is as heavy as that used by any of our competitors, and of a better quality.

You will notice from the above cut the flange projecting around the top edge of the Scraper, which makes it 25 per cent. stiffer than a Scraper of the same gauge without the flange. The Haslup is the only Scraper made with this flange.

Sizes. Net price each.

No. 1. Capacity 7 cubic feet, weight about 100 pounds.....$4.19
No. 2. Capacity 5 cubic feet, weight about 90 pounds..... 3.84
No. 3. Capacity 3½ cubic feet, weight about 80 pounds..... 3.70

Note—Dozen price does not apply to less than a half dozen Scrapers.



Shipped from factory.

THE LATEST IMPROVED HASLUP PATENT WHEEL SCRAPER LEADS THEM ALL.

Cupped hubs and closely fitted sand bands, make the best protection on Spindles against sand. Our wheels are strong, and our Spindles wear the longest.

Description of Sizes. Net price each.

No. 1. Capacity, 9 cubic feet. Size of bowl, 35 inches long, 35 inches wide, 12 inches deep. Wheels, 36 inches high. Tire, 3x¼. Steel axle, 1½ inches square, arched high, spindles turned and polished. Tongues, best quality of hard wood, heavily ironed, with double steel draft bars. Weight, 400 pounds.....$27.50
No. 2. Capacity, 13 cubic feet 34.00
No. 2½ Capacity, 14½ cubic feet 36.30
No. 3. Capacity, 17 cubic feet 40.20

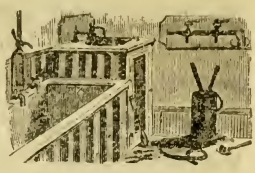
Nos. 2, 2½ and 3 are furnished with heavy wood hub wheels; hubs, spokes and rims made of thoroughly seasoned stock. Sarven or metal wheels are furnished when ordered.

Nos. 2½ and 3 wheelers are furnished regularly with snatch rod, and No. 2 when specially ordered.

PLUMBING AND TINSMITHS' WORK.

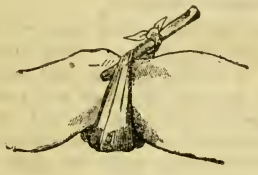
Edited by John Black. 92 pages. Illustrated by 80 engravings.

This little book deals with roof-covering, roof work, gutters, covering flats, platforms, dormers, ridges, etc., finials, pipes, the storage and supply of water, delivery and control of water, elementary sanitation, soil pipes, closets, baths, traps, lead lining for sinks, development of surfaces so as to get the cuts for elbows, angles, etc., how flashings should be put down, snow boards, principles of water supply, drinking water supply, float tanks, hydraulics, etc.



Net price each $0.25

WHAT TO DO IN CASE OF ACCIDENT.



A book for everybody. 96 pages.

This is one of the most useful books ever published. It tells exactly what to do in case of accidents, such as severe cuts, sprains, dislocations, broken bones, burns with fire, scalds, burns with corrosive chemicals, sunstroke, suffocation, with foul air, hanging, drowning; frost-bite, fainting, stings, bites, starvation, lightning, poisons, accidents from machinery, gun-shot wounds, etc., etc. It ought to be in every house and workshop, for young and old are liable to accident, and the directions given in this book might be the means of saving many a valuable life.

Net price each $0.25

PAINTING AND VARNISHING.

Edited by John Black. 94 pages. Illustrated by 20 engravings.

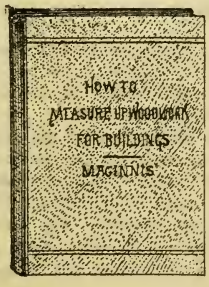
A practical manual treating on materials, principles of color, mixing paints, preparation of surfaces, distemper, decoration, hints on dealing with customers, hints on the use of brushes, what colors to use in different rooms, etc.; varnishes and varnishing, recipes for making various kinds of varnish, graining to imitate oak, mahogany, satin wood, walnut and rosewood; marbling white veined, dove colored, red, green, jasper, black and gold, Florentine, Sienna, etc.; inside painting and decoration gilding, sign writing, lettering, alphabets, stencils, monograms, etc.; outside painting, brickworks, metal work, etc.

Net price each $0.25

HOW TO MEASURE UP WOODWORK FOR BUILDINGS.

By Owen B. Maginnis,

Author of "Roof Framing," "Bricklaying," etc.



79 Pages.

161 Illustrations.

Useful Tables.

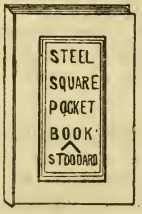
Well Printed.

Neatly Bound.

Price, 50 cents. Copies sent postpaid on receipt of price.

Net price each.....$0.50

THE STEEL SQUARE POCKET BOOK.



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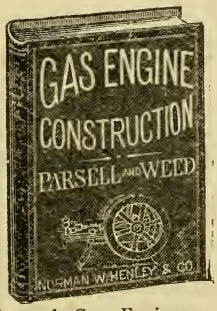

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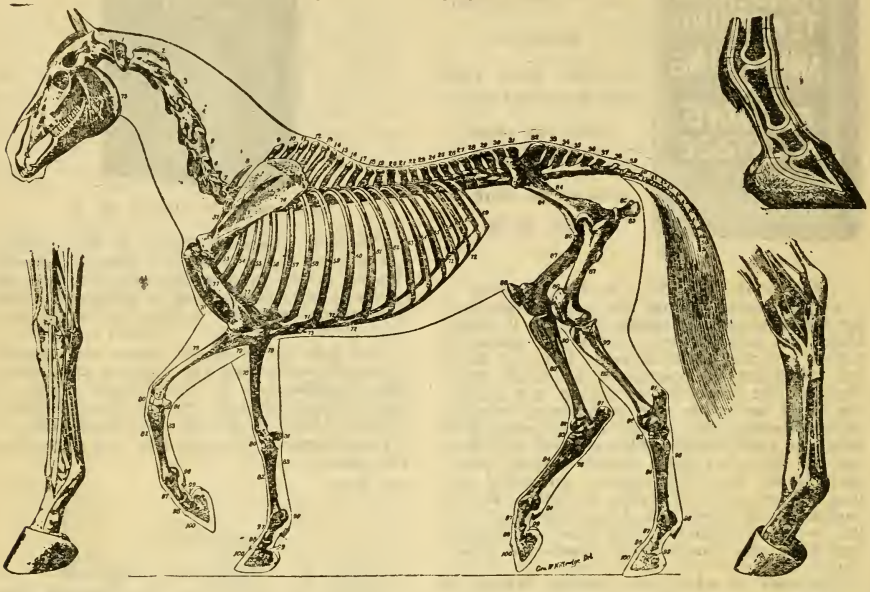

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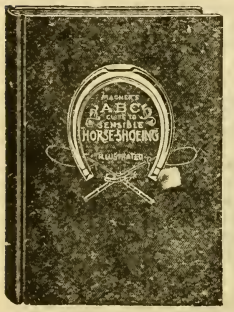

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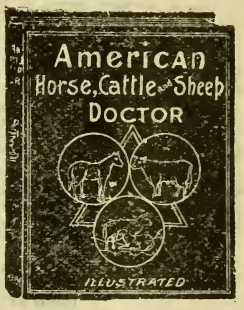

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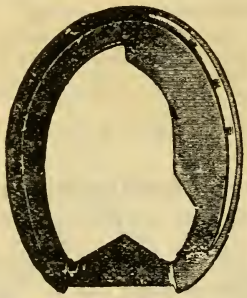

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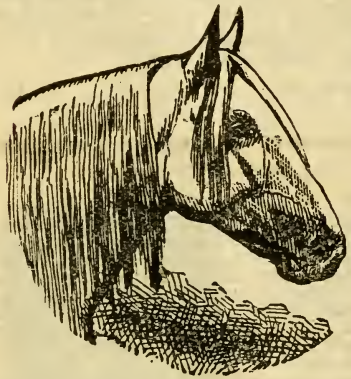

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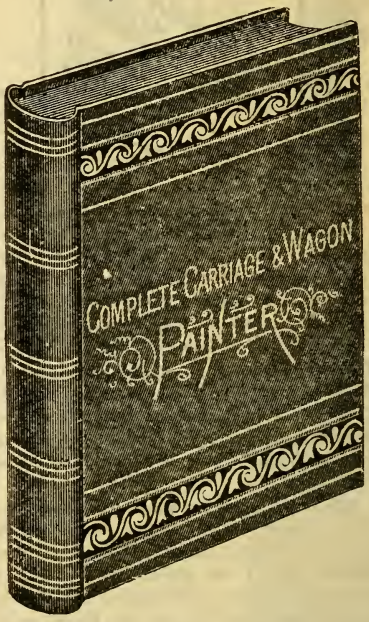

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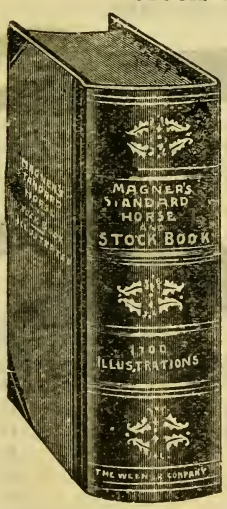

A complete pictorial encyclopedia of practical reference for horse and stock owners. By D. Magner, author of the Art of Taming and Educating Horses, assisted by twelve leading veterinary surgeons.

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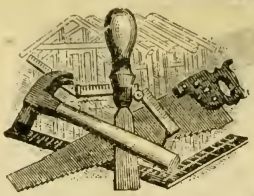


A Practical Manuad edited by John Black. 92 pages; illustrated by 100 engravings.

This book treats on the principles of the subject, the strains in the various members of framed structures; joints of various kinds; simple roofs, king-post roofs, queen-post roofs, hip roofs, roofs covering buildings of irregular plan, Mansard roofs, properties of timber, flooring and timbers for supporting same; trussed beams; partitions, from simple examples to elaborate examples of trussed partitions; method of deadening sound, etc., etc.

Net price each.....$0.25

PRACTICAL JOINERY.

Edited by John Black. 92 pages; illustrated by 130 engravings.

A book that points out the best methods in the various departments of joiner's work such as moulding, classic and Gothic; tongue and groove joints, dowel joints, miter joints, lap joints, dove-tail joints, mortice and tenon joints; cutting timbers, making doors, paneling, hanging doors and windows; skylights; laying down floors; hardwood floors; construction of niches, etc. Woodworking machinery; picture frame making, and instructions on how to use the diagonal scale.

Net price each $0.25

THE STEEL SQUARE.

By F. T. Hodgson, 48 pages, illustrated by 38 engravings.

This work is intended as an elementary introduction for the use of those who have not time to study the larger works on the same subject. The book shows how some difficult problems in carpentry and joinery are simplified and solved by the aid of the carpenter's steel square, together with a full description of the tool, and explanations of the scale, lines and figures on the blade and tongue and how to use them in everyday wokr. Showing how the square may be used in obtaining the lengths and bevels of rafters, hips, groins, braces, brackets, purlins, collar-beams and jack rafters. Also its application in obtaining the bevels and cuts for hoppers, spring mouldings, octagons, diminished styles, etc.

Net price each.....$0.25

"WESTCOTT" ADJUSTABLE "S" WRENCH.

Sizes in stock.		Net price each.
6 inch opens to	¾ inch	$0.40
8 inch opens to	1 inch	.50
10 inch opens to	1⅜ inch	.65
12 inch opens to	1⅝ inch	.85
14 inch opens to	2 inch	1.15

This wrench is acknowledged to be the most convenient and most useful wrench for general use, and can be used in many places inaccessible with the Monkey Wrench.

"WESTCOTT" ADJUSTABLE "S" PIPE WRENCH.

Sizes in stock.		Net price each.
6 inch takes pipe from	⅛ to ⅜ inch	$0.65
8 inch takes pipe from	⅛ to ¾ inch	.85
10 inch takes pipe from	⅛ to 1 inch	1.00
12 inch takes pipe from	⅛ to 1¼ inch	1.40
14 inch takes pipe from	⅛ to 1½ inch	1.75

This adjustable "S" Pipe Wrench is the handiest and most convenient pipe wrench for steam or gas fitters' use, and can be used to advantage in a corner, or in a contracted space. It releases quickly and has a firm grip.

HAWKEYE WRENCH.

FIVE IN ONE NUT WRENCH.

PIPE WRENCH AND THREAD CUTTERS.

Best Wrench Made for Automobiles.

Has more uses than any wrench made.

No. 200 Regular, net price each.....$0.40

Net price per dozen..... 4.00

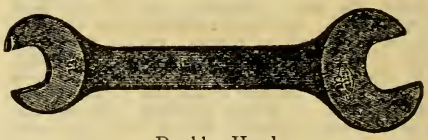
Will remove "Neverslip" and "Rowe" Calks.

The Best Wrench Made.

This Wrench is made of 50-point open hearth drop-forged carbon steel. Jaws will take ¼ to ¾ inch pipe.

DROP FORGED WRENCHES.

ENGINEERS' WRENCHES.



No.	Size Bolt.	Openings, Inches.	Full Length.	Price Each
22	⅛ and ¼	5/16 and ½	4	$0.10
23	3/16 and ¼	13/32 and ½	4	.11
25	¼ and 5/16	½ and 19/32	4⅞	.13
27	5/16 and ⅜	13/16 and 11/16	5⅞	.16
29	⅜ and 7/16	11/16 and 25/32	6⅞	.20
31	7/16 and ½	25/32 and ⅞	7¾	.22
33	½ and 9/16	⅞ and 31/32	8¾	.25
36	9/16 and ¾	31/32 and 1¼	11⅝	.35
37	⅝ and ¾	1 7/16 and 1¼	11⅝	.36
39	¾ and ⅞	1¼ and 1 7/16	13½	.45
43	1 and 1⅛	1⅝ and 1 13/16	17⅜	.65
45	1⅛ and 1¼	1 13/16 and 2	19⅜	.80
47	1¼ and 1⅜	2 and 2 3/16	21¼	1.00

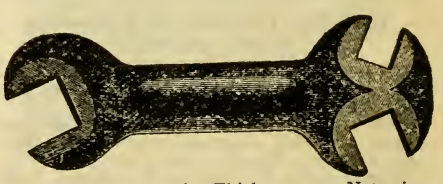
TWIN WRENCHES.

10 inches long.....$0.45

DOUBLE HEAD "S" WRENCH.

No.	Size of Opening.	Thickness of Heads.	Price each.
220	⅜ and 7/16	¼	$0.08
221	½ and 9/16	5/16	.12
222	¾ and 13/16	⅜	.15
223	⅞ and 1	7/16	.17
224	1 and 1⅛	½	.20
225	13/16 and 1¼	9/16	.25

TRIPLE HEAD, SET SCREW WRENCH



For Set Scr. Sizes	Length Over All.	Thickness of Heads.	Net price Each.
½ ⅝ ¾	5⅝	⅜	$0.20

THE ALLIGATOR WRENCH.

No.	Lgth., Inches	Holds Pipe, Inches	Holds Round Iron, Inches	Net Price Each
1	5¾	⅛ to ⅜	¼ to ¾	$0.10
2	10	⅜ to ¾	½ to 1	.27
3	16	½ to 1¼	¾ to 1⅜	.54

WRENCHES.

Agricultural.

Sizes.	Net price each.	Sizes.	Net price each.
6 inch	$0.17	10 inch	$0.24
8 inch	.20	12 inch	.29
		15 inch	.40

COE'S KNIFE HANDLE WRENCH.

Sizes.	Net price each.	Sizes.	Net price each.
6 inch	$0.38	15 inch	$1.00
8 inch	.42	18 inch	1.25
10 inch	.50	21 inch	1.50
12 inch	.59		

TRIMO PIPE WRENCH.

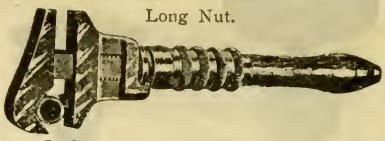
Sizes.	Net price Each.	Net price Ex Nuts.	Net Price Ex Jaws.
6 inch	$0.60	$0.10	$0.30
8 inch	.65	.10	.30
10 inch	.70	.15	.40
14 inch	.90	.20	.50
18 inch	1.20	.25	.60
24 inch	2.25	.35	1.00

SAUNDERS' PIPE CUTTER.

No.	Cuts Pipe from	Each	Extra Whls.	Extra Rollers.
1	⅛ to 1 inch	$0.70	$0.10	$0.12
2	1 to 2 inch	1.05	.12	.12
3	2 to 3 inch	2.50	.20	.20

BEMIS AND CALL COMBINATION WRENCHES.

Long Nut.

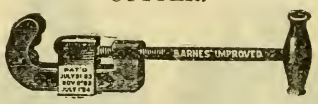


Sizes, Inches	10	12	15
Net price each	$1.20	$1.35	$1.85
Net price extra Dogs.	.15	.20	.25

STILLSON PIPE WRENCHES.

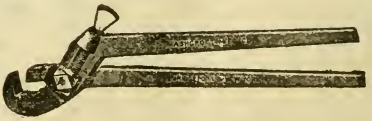
Sizes.	Net price Each.	Net price Ex Nuts.	Net Price Ex Jaws.
6 inch	$0.60	$0.10	$0.30
8 inch	.65	.10	.30
10 inch	.70	.15	.40
14 inch	.90	.20	.50
18 inch	1.20	.25	.60
24 inch	2.25	.35	1.00

BARNES' THREE WHEEL PIPE CUTTER.



No.	Cut Pipe from	Net Price each.	Net prices Cutter Wheels.
1	⅛ to 1 inch	$0.90	$0.08
2	½ to 2 inch	1.20	.10
3	1½ to 3 inch	2.00	.12
4	2½ to 4 inch	4.75	.15

BROWN'S PIPE TONGS.

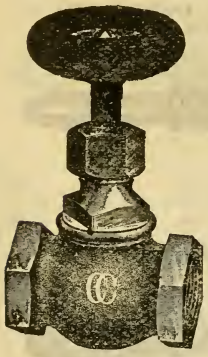


		Net price each.
No. 1,	takes pipe ⅛ to ¾ inch	$0.75
No. 1½,	takes pipe ⅜ to 1 inch	.90
No. 2,	takes pipe ½ to 1¼ inch	1.00
No. 3,	takes pipe 1 to 2 inch	1.35
No. 4,	takes pipe 1½ to 3 inch	3.00

COMBINATION PLIERS.

Sizes.	Net price each.
6 inch, Cornell Nickel plated	$0.50
6 inch, Genuine Billings & Spencer	1.00

GLOBE AND ANGLE VALVES.



Globe Valve

Angle Valve

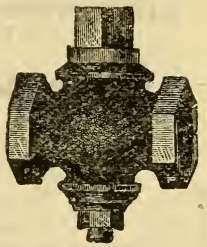
STANDARD GLOBE AND ANGLE VALVES.

Sizes.	Net Prices. Doz.	Each.	Sizes.	Net Prices. Doz.	Each.
¼ in...	$3.36	$0.35	1¼ in..	$11.40	$1.10
⅜ in...	3.60	.40	1½ in..	16.20	1.50
½ in...	4.80	.50	2 in..	24.00	2.25
¾ in...	6.00	.60	2½ in..	45.00	4.00
1 in...	8.40	.80			

CHECK VALVE.

Brass Check Valve

STEAM COCK.



Brass Steam Cock

BRASS CHECK VALVES.

Sizes.	Net Prices. Doz.	Each.
⅜ inch	$ 3.60	$0.35
½ inch	4.20	.40
¾ inch	5.40	.55
1 inch	7.80	.75
1¼ inch	10.20	.95
1½ inch	17.40	1.60
2 inch	21.60	2.00

BRASS STEAM COCKS.

Sizes.	Net prices. Doz.	Each.
⅜ inch	$ 4.20	$0.40
½ inch	5.40	.50
¾ inch	7.20	.70
1 inch	9.60	.95
1¼ inch	15.00	1.40
1½ inch	20.40	1.90
2 inch	27.00	2.50

GATE VALVES.

Size.	Net Prices. Doz.	Each.
½ inch	$ 7.20	$0.70
¾ inch	9.60	.90
1 inch	13.80	1.25
1¼ inch	19.20	1.75
1½ inch	27.80	2.35
2 inch	39.00	3.50

IRON COCKS.

IRON Cock.

BRASS GAS SERVICE COCKS.

Brass Gas Service Cock.

ALL IRON COCKS.

Sizes.	Net prices. Doz.	Each.	Sizes.	Net prices. Doz.	Each.
¾ in...	$4.20	$0.40	2 in..	$11.40	$1.05
1 in...	4.80	.45	2½ in..	19.20	1.70
1¼ in...	7.20	.65	3 in..	25.20	2.50
1½ in...	8.40	.75	4 in..	63.00	5.50

GAS SERVICE COCKS.

Sizes.	Net prices. Doz.	Each.	Sizes.	Net prices. Doz.	Each.
⅜ in....	$3.60	$0.35	1¼ in...	$9.60	$0.90
½ in....	4.20	.40	1½ in...	13.80	1.25
¾ in....	5.40	.50	2 in...	22.20	2.00
1 in....	7.25	.65			

BIBB AIR COCKS.

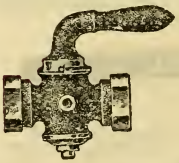
Straight

Bibb

AIR COCKS.

Size	⅛	¼	⅜
Straight T Handle, net price each...	$0.20	$0.20	$0.25
Doz.	2.00	2.00	2.50
Bibb T Handle, net price each	.25	.25	.35
Doz.	2.50	2.50	3.00

STOP AND WASTE COCKS.



Sizes.	Doz.	Each.
½ in....	$9.60	$0.90
⅝ in....	10.80	1.00
¾ in....	12.60	1.20
1 in....	21.00	2.00

Reversible.

RETURN BENDS.

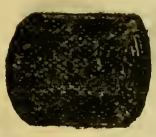
Return Bend Close

Return Bend Open

Sizes, inches	½	¾	1	1¼	1½	2
Close, net price each	$0.10	.12	.15	.20	.22	.30
Open, net price each	.10	.12	.15	.20	.22	.30
Close, net price doz.	.96	1.20	1.44	2.00	2.20	3.00
Open, net price doz.	.96	1.20	1.44	2.00	2.20	3.00

COUPLINGS.

Wrought Coupling. Reducing Coupling.

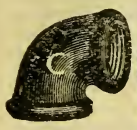


Sizes.	Doz. Black	Each Black	Doz. Galv.	Each Galv.
⅛ inch	$0.30	$0.03	$0.36	$0.04
¼ inch	.30	.03	.36	.04
⅜ inch	.36	.04	.48	.05
½ inch	.42	.05	.60	.06
¾ inch	.60	.06	.72	.08
1 inch	.72	.07	.96	.10
1¼ inch	.84	.09	1.20	.12
1½ inch	1.08	.12	2.28	.25
2 inch	1.20	.14	2.64	.28
2½ inch	2.00	.20	....	...
3 inch	2.40	.25	....	...
4 inch	4.80	.50	....	...

MALLEABLE REDUCING COUPLINGS.

Sizes.	Net Price Doz.	Net Price Each	Sizes.	Net Price Doz.	Net Price Each
¼x⅛ in.	$0.24	$0.03	1 x ¾ in.	$0.60	$0.07
⅜x¼ in.	.24	.03	1¼x ¾ in.	1.00	.10
½x¼ in.	.36	.04	1¼x1 in.	1.00	.10
½x⅜ in.	.36	.04	1½x1 in.	1.20	.12
¾x⅜ in.	.42	.05	1½x1¼ in.	1.20	.12
¾x½ in.	.48	.05	2 x1 in.	1.68	.18
1 x½ in.	.60	.07	2 x1½ in.	1.90	.20

MALLEABLE IRON FITTINGS.



Elbow.

Tee.

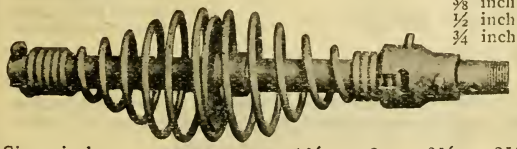
Cross.

PRICE ON ELBOWS ONLY.

Net Price.

Sizes.	Doz. Black.	Each Black.	Doz. Galv.	Each Galv.
⅛ inch	$0.35	$0.04	.....	.....
¼ inch	.35	.04	.....	$0.05
⅜ inch	.35	.04	$0.48	.06
½ inch	.45	.05	.72	.07
¾ inch	.60	.06	.95	.10
1 inch	.95	.09	1.20	.12
1¼ inch	1.20	.11	1.80	.18
1½ inch	1.45	.13	2.40	.26
2 inch	2.25	.22	4.20	.40
2½ inch	4.20	.40	....	...
3 inch	7.20	.70	....	...
4 inch	12.00	1.20	....	...

THE AMERICAN BOILER TUBE CLEANER.



Size, inches	1¾	2	2¼	2½	2¾	3	3¼	3½	4
Net price, each	$0.40	$0.45	$0.55	$0.60	$0.65	$0.70	$0.80	$0.85	$0.95

This cut shows a boiler tube cleaner which needs no praise from us—it speaks for itself. While the price is very low, this tool is far superior to many cleaners which cost twice the money.

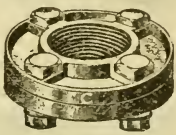
NIPPLES.

Net price each.

Sizes.	Short.	Long	to inches.
⅛ inch	$0.02	$0.03	3½
¼ inch	.08	.03	3½
⅜ inch	.02	.03	3½
½ inch	.02½	.04	3½
¾ inch	.03	.05	4
1 inch	.04	.06	4
1¼ inch	.05	.08	4½
1½ inch	.06	.10	4½
2 inch	.09	.13	4½
2½ inch	.18	.28	5
3 inch	.24	.32	5
4 inch	.40	.55	6

UNIONS.

Malleable Lipped



Flanged.

MALLEABLE LIPPED UNIONS.

Sizes	Net Price Each	Net Price Doz.	Sizes	Net Price Each	Net Price Doz.
⅛ inch	$0.08	$0.35	1 inch	$0.18	$1.65
¼ inch	.08	.35	1¼ inch	.20	2.15
⅜ inch	.10	.25	1½ inch	.25	2.40
½ inch	.12	1.05	2 inch	.30	3.00
¾ inch	.15	1.20			

FLANGE UNIONS.

Sizes	Net Price Each	Net Price Doz.	Sizes	Net Price Each	Net Price Doz.
1 inch	$0.30	$3.00	2½ inch	$0.70	$7.20
1¼ inch	.35	3.60	3 inch	.80	8.40
1½ inch	.40	4.20	4 inch	1.00	10.80
2 inch	.60	6.00			

TEES.

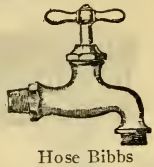
Sizes	Net Price Each	Net Price Doz.	Sizes	Net Price Each	Net Price Doz.
⅛ inch	$0.03	$0.30	1¼ inch	$0.14	$1.44
¼ inch	.03	.30	1½ inch	.17	1.80
⅜ inch	.05	.48	2 inch	.28	2.64
½ inch	.06	.60	2½ inch	.45	4.56
¾ inch	.08	.84	3 inch	.65	6.60
1 inch	.10	.96			

CROSSES.

Sizes	Net Price Each	Net Price Doz.	Sizes	Net Price Each	Net Price Doz.
¼ inch	$0.05	$0.48	1 inch	$0.15	$1.44
⅜ inch	.05	.48	1¼ inch	.15	1.44
½ inch	.06	.60	1½ inch	.20	2.04
¾ inch	.10	.96	2 inch	.35	3.60

COMPRESSION BIBBS.

Plain Bibbs



Hose Bibbs

COMPRESSION PLAIN BIBBS.

Net price each	$0.50	.55	.60

COMPRESSION HOSE BIBBS.

Size, inches	½	⅝	¾
Net price each	$0.60	.65	.70

MALLEABLE IRON FITTINGS.

CAP.

BUSHING.

CAPS.

Sizes.	Each.	Doz.	Sizes.	Each.	Doz.
¼ inch	$0.03	$0.24	1 inch	$0.07	$0.60
⅜ inch	.03	.24	1¼ inch	.10	.96
½ inch	.04	.36	1½ inch	.11	1.08
¾ inch	.05	.42	2 inch	.15	1.44

BUSHINGS.
Net Price

Sizes.	Each.	Doz.	Sizes.	Each.	Doz.
¼ inch	$0.03	$0.24	1½ inch	$0.07	$0.54
⅜ inch	.03	.24	2 inch	.08	.72
½ inch	.03	.24	2½ inch	.10	.96
¾ inch	.04	.30	3 inch	.15	1.44
1 inch	.05	.36	4 inch	.25	
1¼ inch	.06	.48			

MALLEABLE IRON FITTINGS.

Street Elbow

Lock Nut

STREET ELBOWS.
Net Price.

Sizes.	Each.	Doz.	Sizes.	Each.	Doz.
⅜ inch	$0.05	$0.48	1¼ inch	$0.15	$1.44
½ inch	.06	.60	1½ inch	.18	1.80
¾ inch	.07	.72	2 inch	.25	2.64
1 inch	.10	1.08			

LOCK NUTS.
Net Price

Sizes.	Each.	Doz.	Sizes.	Each.	Doz.
¼ inch	$0.02	$0.20	1 inch	$0.05	$0.40
⅜ inch	.02	.20	1¼ inch	.05	.45
½ inch	.03	.25	1½ inch	.06	.60
¾ inch	.04	.30	2 inch	.08	.80

CAST PLUGS.
Net Price.

Sizes.	Each.	Doz.	Sizes.	Each.	Doz.
¼ inch	$0.02	$0.18	1¼ inch	$0.04	$0.40
⅜ inch	.02	.18	1½ inch	.06	.60
½ inch	.02	.18	2 inch	.08	.84
¾ inch	.03	.25	2½ inch	.15	1.44
1 inch	.03	.30	3 inch	.20	2.00

ENGINEER'S FAVORITE TUBE CLEANER.

Sizes.	Net price each.	Sizes.	Net price each.
1¾ inch	$0.60	3 inch	$0.90
2 inch	.65	3¼ inch	.98
2¼ inch	.68	3½ inch	1.05
2½ inch	.75	3¾ inch	1.10
2¾ inch	.80	4 inch	1.20

STEEL WIRE TUBE CLEANER.

Sizes.	Net price each.	Sizes.	Net price each.
1 inch	$0.30	2½ inch	$0.60
1¼ inch	.35	2¾ inch	.65
1½ inch	.40	3 inch	.70
1¾ inch	.45	3¼ inch	.75
2 inch	.50	3½ inch	.80
2¼ inch	.55	4 inch	.90

STEAM, GAS AND WATER PIPE.

BLACK.—Butt Welded.

Sizes.	Net price per foot.
⅛ inch	Prices on application.
¼ inch	Prices on application.
⅜ inch	Prices on application.
½ inch	Prices on application.
¾ inch	Prices on application.
1 inch	Prices on application.
1¼ inch	Prices on application.

Lap Welded.

Sizes.	Net price per foot.
1½ inch	Prices on application.
2 inch	Prices on application.
2½ inch	Prices on application.
3 inch	Prices on application.
3½ inch	Prices on application.
4 inch regular lengths	Prices on application.
4 inch short lengths	Prices on application.

GALVANIZED.—Butt Welded.

Sizes.	Net price per foot.
⅜ inch	Prices on application.
½ inch	Prices on application.
¾ inch	Prices on application.
1 inch	Prices on application.
1¼ inch	Prices on application.

Lap Welded.

Sizes.	Net price per foot.
1½ inch	Prices on application.
2 inch	Prices on application.
2½ inch	Prices on application.
3 inch	Prices on application.

WELL CASING.

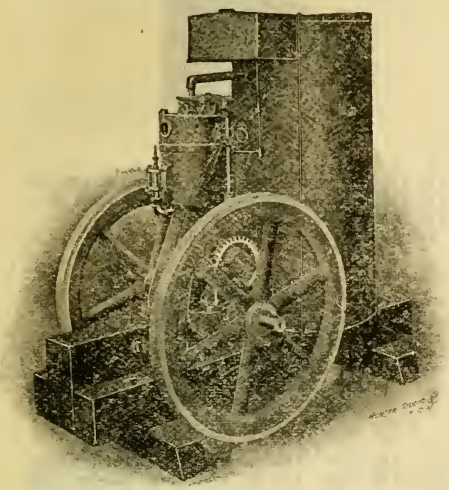
Sizes.	Net price per foot.
4¼ inch regular lengths	Prices on application.
4¼ inch short lengths	Prices on application.

COUPLINGS.

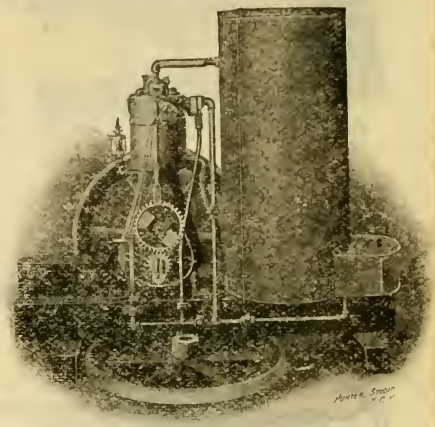
	Net price each.
4 inch Pipe Couplings	Prices on application.
4¼ inch Casing Couplings	Prices on application.

THE BARLOW GAS AND GASOLINE ENGINES.

Shipped from factory.



GRAVITY PLAN.



PUMP PLAN.
Gasoline tank is below the engine.

Complete and ready to operate. Gasoline tank hung on edge of the water tank. The construction is of the 4-cycle type, which has proven reliable. Any grade of gasoline, natural or artificial gas, can be used. It is easy to start and easy to operate. These engines are complete as follows:

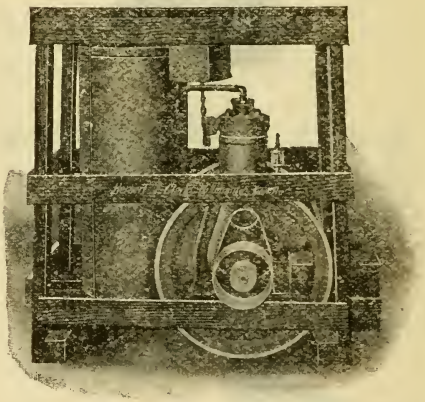
Both water and gasoline tanks, exhaust muffler, starting crank, standard drive pulley, lubricators, electric battery and spark coil, all wired, piped and skidded, ready to run; also can of oil, packings, tools and wrenches.

Gas Engines are fitted with a gas bag in place of gasoline tank.

Actual H.P.	Floor Space	Height	Speed	Pulley	Weight
4	28 x 50	50	400	7 x 5	600
6	30 x 54	54	350	9 x 5	900

NET PRICE EACH F. O. B. FACTORY.

4 H.P. Engine, Gravity Plan	$ 80.00
6 H.P. Engine, Gravity Plan	115.00
4 H.P. Engine, Pump Plan	85.00
6 H.P. Engine, Pump Plan	120.00



This cut shows engine ready for shipment, and ready to run as soon as tanks are filled. WE WILL MAIL A SPECIAL CATALOG OF THESE ENGINES, GIVING FULL DESCRIPTION AND GUARANTEE UPON APPLICATION.

POLISHED STEEL SHAFTING.

Shipped from factory.

Diameter	15/16	1	1 1/16	1 1/8	1 3/16	1 1/4	1 5/16	1 3/8	1 7/16	1 1/2	1 9/16	1 5/8	1 3/4	1 15/16	2	2 1/4
Net price per ft	9 1/2	10	11	12 1/2	13 1/2	15	16 1/2	18	20	20 1/2	22	23	28	35	37	43

MALLEABLE IRONS.

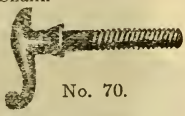
No. 35.

	Ins. Inside Small End	Ins. Inside Large End	Ins. Deep	Price Doz.
C	3/4	13/16	7/8	6c
D	7/8	15/16	1	6c
E	15/16	1 1/8	1	12c
F	1 1/8	1 3/16	1 1/8	14c
G	1 1/4	1 5/16	1 3/16	16c
H	1 3/8	1 1/2	1 3/8	18c
J	1 1/2	1 5/8	1 3/8	20c

No. 35.

A	B	C
5/16	3/8	7/16 in. Screw Shank
2 3/4	3 1/4	3 5/8 in. long.
7c	9c	15c price doz.

A	B
3/8	7/16 in. Screw Shank.
3	3 1/4 in. long.
10c	15c Price doz.



No. 70.

3/8 in. Screw Shank.
3 1/4 in. long.

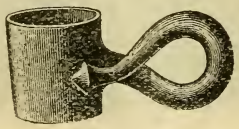
No. 75.

Price per doz.....15c

No. 120.

C	D	E
1 1/4	1 3/8	1 1/2 in. diam. small end.
1 5/16	1 7/16	1 9/16 in. diam. large end.
1 1/2	1 1/2	1 1/2 in. deep.
3 5/8	4	4 in. long.
12c	13c	14c price per pair.

In pairs, right and left.



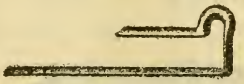
No. 125.

1 1/4 x 1 3/8	1 1/4 x 1 9/16 in. diam. small end
1 5/16 x 1 7/16	1 7/16 x 1 11/16 in. diam. large end
1 1/2 2 1/8 in. deep.	A. Price per pair...12c
4 1/4 4 3/4 in. long.	B. Price per pair...18c

Oval Ferrule. In pairs, right and left.

No. 140.

Hook for Nos. 145 and 150.
1/2 in. Iron.
4 in. long.
Price each.....3 1/2c



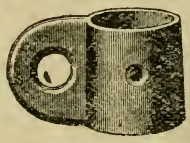
No. 150.

7/8 in. wide.
1 1/2 in. between Clips.
10 in. long.
7c Price each.
Used with hook on No. 140.

MALLEABLE IRONS.

No. 165.

A	B	C	D	E
1 1/4	1 3/8	1 1/2	1 5/8	1 3/4 in. diam. inside small end
1 3/8	1 1/2	1 5/8	1 3/4	1 7/8 in. diam. inside large end
1 5/8	1 7/8	2 1/8	1 7/8	2 1/8 in. deep.
2c	3c	4c	4c	5c price each.



No. 170.

A	B	C	E
1 1/4	1 3/8	1 1/2	1 3/4 in. diam. inside small end.
1 3/8	1 1/2	1 5/8	1 7/8 in. diam. inside large end.
3c	4c	4c	5c price each.

All sizes 1 5/8 inches deep.

4 in. length of Shank.
7/16 in. size of Shank.
1 5/8 in. center to center.
12c net price each.

No. 200.

Furnished threaded, with Nuts.

No. 600.

3 1/4 inches long. 5/16 inch Bolt.
Price per doz.....$0.05

No. 615.

3 11/16 inches long. 5/16 inch Bolt.
Price per doz.....$0.06

No. 625.

A	B	C
4	15/16	3 15/16 inches long.
5/16	3/8	7/16 inch Bolt.
7c	8c	9c price per doz.

No. 630.

A	B
3 3/4	4 1/2 inches long.
3/8	3/8 inch Bolt.
8c	15c price per doz.

MALLEABLE IRONS.

WHIFFLETREE CLEVISES

No. 632.

FOR SHAFTS.

C	D	E	
1½x2	1⅝x2⅛	1¾x1⅞	inch Cross Bar.
1½	1⅝	1½	inch Whiffletree.
5/16	5/16	5/16	inch Bolt.
$0.03	.04	.04	price each.

No. 633.

FOR POLES.

A	D	
1¼x1⅞	1½x2	in. Evener.
1⅜	1½	in. Whiffletree
5/16	5/16	in. Bolt.
With Check Loop.		
$0.04	$0.05	price each.

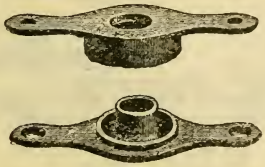
A	B	D	
5/16	5/16	5/16	in. Bolt.
3	3¾	3½	in. inside.
$0.03	.04	.05	price each.

No. 635.

No. 640.

FOR SHAFTS.

A	B	C	
3¼	3½	3¾	in. inside.
⅜	⅜	⅜	in. Bolt.
$0.03	.04	.05	price each.

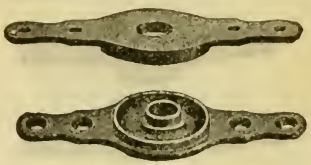


No. 690.

HIGH PATTERN.

A	B	C	D	
1⅜	1½	1⅝	1¾	in. wide.
5/16	⅜	⅜	⅜	in. Bolt.
$0.05	.05	.05	.06	price per pair.

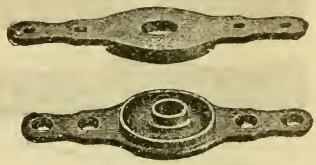
MALLEABLE IRONS.



No. 695.

LOW PATTERN.

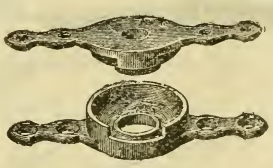
A	B	C	D	E	F	G	H	J	
1⅜	1½	1¾	2	2⅛	2¼	2½	2¾	3	in wide
3¾	4	4½	4⅞	5⅛	5⅜	5¾	6¼	6½	in. long
$0.03	.03	.04	.06	.07	.07	.09	.11	.12	pair.



No. 700.

BIG PATTERN.

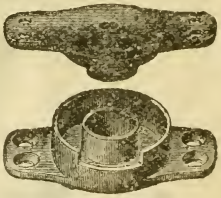
D	C	A	B	E	
1½	1¾	1⅞	2¼	2⅓	inch wide.
4	5	4⅞	5½	5¾	inch long.
⅜	⅜	⅜	7/16	7/16	inch Bolt.
$0.05	.06	.07	.09	.12	price per pair.



No. 705.

WITH STOP.

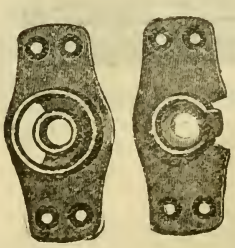
1¾ in. wide.
4½ in. long.
⅜ in. bolt.
$0.07 per pair.



No. 710.

WITH STOP.

1¾ in. wide.
⅜ in. bolt.
$0.07 per pair.



No. 715.

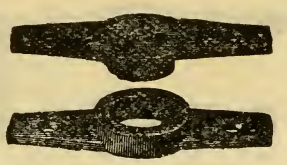
Will not unfasten should the bolt break.

WITH STOP.

(Self Locking.)

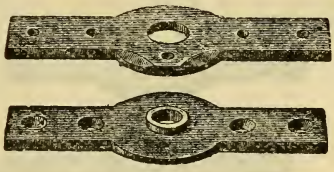
A	B	
1½	1⅜	in. wide.
3	3⅜	in. long.
5/16	5/16	in. bolt.
$0.05	.07	pair.

MALLEABLE IRONS.



No. 725.

5¾ inch long.
2⅛ inch bed.
½ inch king bolt.
Net price per pair.....$0.10

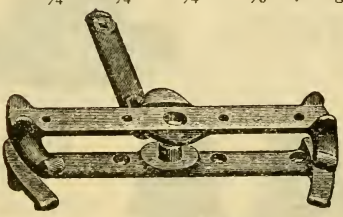


No. 730.

8⅛ inch long.
8½ inch bed.
3⅛ inch diameter circle.
9/16 inch king bolt.
Net price per pair.....$0.20

No. 740.

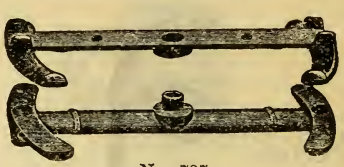
G	A	H	B	C	
$0.21	.26	.34	.35	.45	net price per pair.
14½	16½	17⅝	18⅜	20	in. long.
1⅜	1½	1⅝	1¾	1⅞	in. bed.
½	⅝	9/16	⅝	⅝	in. king bolt
J	D	K	E	F	
$0.61	.65	.68	.80	.98	net price per pair.
21	23	22⅝	23¼	22⅝	in. long.
2	2⅛	2¼	2⅜	2¾	in. bed.
¾	¾	¾	¾	⅞	in. king bolt



No. 736.

1¼ inch head block.
1¼ inch axle.
9½ inch circle.
2 inch drop.
⅞ inch perch.
⅜ inch king bolt.
Net price per set.....$0.25
Order by Number.

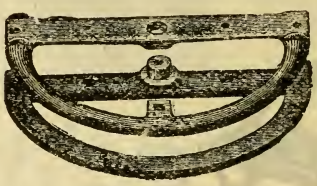
MALLEABLE IRONS.



No. 737.

IMPROVED PATTERN.

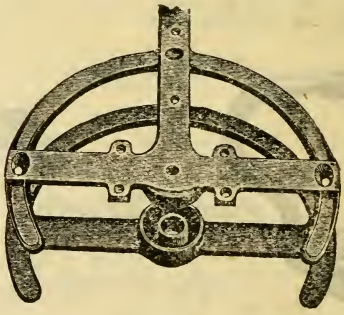
A	B	C	D	E	F	
$0.20	.22	.24	.22	.22	.24	net price per set.
1	1⅛	1¼	1⅛	1¼	1¼	in. bolster.
1	1⅛	1¼	1	1	1⅛	in. axle.
9	9½	9½	9½	9½	9½	in. circle.
⅜	⅜	⅜	⅜	⅜	⅜	in. king bolt.



No. 743.

TIMKEN FIFTH WHEEL.

1 inch axle.
1¼ inch head block.
8½ inch diameter circle.
⅜ inch king bolt.
Net price per set.....$0.21



No. 747.

SINGLE REACH GEARS.

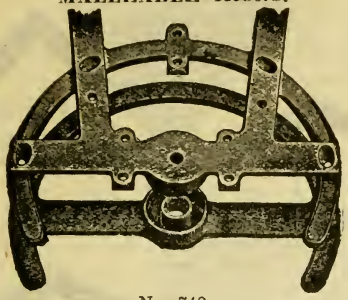
A	B	
$1.00	$1.35	net price per set.
1⅝	1⅞	in. width of H. P. Plate.
14	16	in. diameter of circle.
½	9/16	in. king bolt.
1½	1½	in. perch.
⅜	⅜	in. clips.

A used with 1¾ or 2 in. Spring—1⅜ or 1⅝ in. Axle.

B used with 2 or 2¼ in. Spring—1⅜ or 1⅝ in. Axle.

Order by Number.

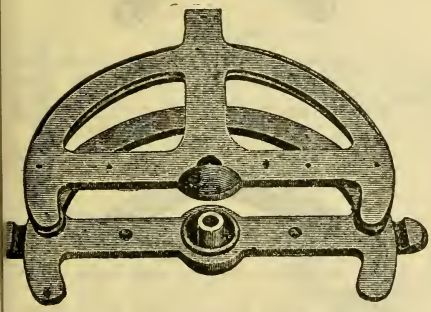
MALLEABLE IRONS.



No. 748.

DOUBLE PERCH GEARS.

1⅝ in. width of H. B. plate.
14 in. diam. of circle.
⅞ in. width of circle.
½ in. king bolt.
1⅜ in. perch.
⅜ in. clips.
Used with 1¾ or 2 in. Spring—1¾ to 1½ inch Axle. Net price per set.....$1.15



No. 761.

FIFTH WHEEL FOR SINGLE PERCH GEARS HEAVY PATTERN.

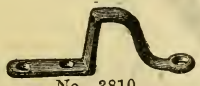
D	E	A	B	C	
14	14	14	15	16½	in. circle.
1⅛	1¼	1⅝	1¾	2	in. head block.
1⅛	1¼	1¼	1⅜	1½	in. perch.
1⅛	1¼	1⅛	1⅜	1⅝	in. width circle.
½	½	½	⅝	¾	in. king bolt.
$0.75	.85	.90	1.50	2.00	net price per set.

HOLD BACK.

No. 3805.

B—1¼ in. strap, ... in. wided. 2¾ in. long.
Net price per pair.....$0.03

HOLD BACK.

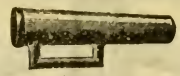


No. 3810.

A—1 in. strap. 4 in. long.
B—1½ in. strap. 4¾ in. long.
Net price per pair.....$0.05
Order by Number.

MALLEABLE IRONS.

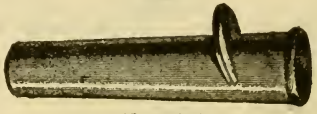
NECK YOKE TIPS.



No. 3830.

			Net price each.
B— ⅞ in. diameter.	4⅛ in. long.....		$0.04
C—1 in. diameter.	4⅝ in. long.....		.05
D—1⅛ in. diameter.	4¾ in. long.....		.06

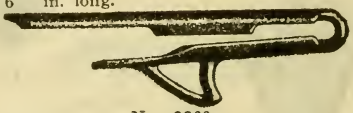
POLE TIPS.



No. 3845.

		Net price each.
A—1⅛ in. diameter	.....	$0.07
B—1¼ in. diameter	.....	.08
C—1⅜ in. diameter	.....	.09
D—1½ in. diameter	.....	.10

6 in. long.



No. 3860.

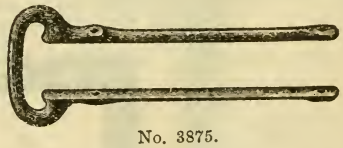
17 in. long. 2½ in. diameter. 1¾ in. loop. ⅜ in. holes. Net price each.....$0.28

TONGUE CAP.

A	B	
1¾	2	in. wide inside.
6	6	in. long.
5/16	5/16	in. hole.
$0.10	.12	net price each.

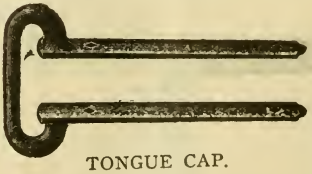
No. 3870.

TONGUE CAP.



No. 3875.

C	A	B	
1¾	2	2	in. wide inside.
10	10	13¾	in. long.
5/16	5/16	5/16	in. holes.
$0.20	.22	.26	net price each.



TONGUE CAP.

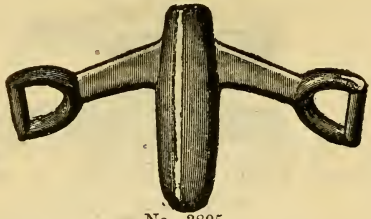
No. 3880.

A	B	C	D	
2	2¼	2½	2¾	in. wide inside.
10¾	10¾	12¾	12¾	in. long.
7/16	7/16	7/16	7/16	in. holes.

Net price each $0.30
Order by Number.

MALLEABLE IRONS.

POLE CRAB.



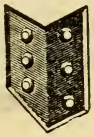
No. 3895.

A—1⅜ in. socket. 1½ in. loops. 6 in. length socket. 10 in. length yoke.
Net price each 20c

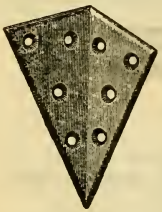
B—1½ in. socket. 1¾ in. loops. 6½ in. length socket. 11 in. length yoke.
Net price each 23c

FOR SEAT.

2⅜ in. long. 1x1 in. wide, 57 degrees angle. In pairs, right and left.
Net price per pair.....$0.05



No. 4005.



No. 4012.

FOR SEAT.

4¾ in. long. 2¼x2¼ in. wide. 63 degree angle. In pairs, right and left.
Net price per pair....$ .06

BOTTOM CORNER.

2¾x2¾x3⅞ inch.
Net price per pair..5c

No. 4360.

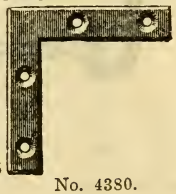
No. 4370.

SQUARE EDGE.

B—⅜ in. wide, 3½ in. long.
C—½ in. wide, 3½ in. long.
Net price per pair.....$0.05

BEVELED EDGE.

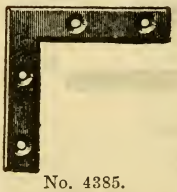
A—⅝ in. wide, 3½ in. long. B—¾ in. wide, 3½ in. long.
Net price per pair....$0.05



No. 4380.

SQUARE EDGE.

A—$\frac{5}{16}$ in. wide, 2½ in. long.
B—$\frac{7}{16}$ in. wide, 1⅝ in. long.
C—½ in. wide, 2¼ in. long.
D—½ in. wide, 2¾ in. long.
E—⅝ in. wide, 2¾ in. long.
F—¾ in. wide, 3½ in. long.
G—⅞ in. wide, 4 in. long.



No. 4385.

Net price per pair.....$0.05
Order by Number.

MALLEABLE IRONS.

½ in. wide, 2½x2½ in. long. For top of beveled right angle corner. 26 degrees bevel.
Net price per pair...$0.05

No. 4400.

No. 4410.

B—$\frac{9}{16}$ in. wide, 2⅝ in. long.
D—¾ in. wide, 2⅝ in. long.

For inside of square right angle corner.
Net price per pair.....$0.05

A—½ in. wide, 2½x2½ in. long. 72 degrees angle.
B—½ in. wide, 2¾x2¾ in. long. 75 degrees angle.
For inside of beveled corner.
Net price per pair ...$0.05

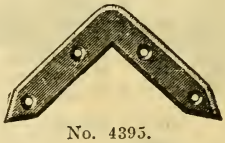
No. 4415.

No. 4405.

¾ in. wide, 3½x3½ in. long. 38 degrees bevel. For top of beveled corner. In pairs, right and left.
Net price per pair.....$0.05

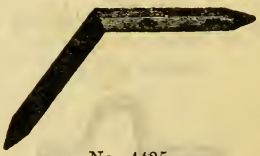
No. 4462.

A—$\frac{9}{16}$ in. wide. 3⅞ in. long from angle. 64 degrees angle.
B—⅝ in. wide, 3⅜ in. long from angle. 51 degrees angle.
C—⅝ in. wide, 3½ in. long from angle.
In pairs, right and left.
Net price per pair.....$0.06



No. 4395.

$\frac{13}{16}$ in. wide. 4x4 in. long. Top of square corner.
Net price per pair.....$0.05



No. 4425.

3⅞ in. wide. 3⅝ in. long. 75 degrees angle. Beveled.
Net price per pair.....$0.06
Order by Number.

MALLEABLE IRONS.

No. 4060.

SEAT CORNER IRONS.

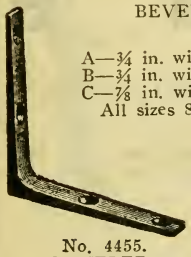
2½x1½ in. width. ⅞ in. width of Bib. 1⅛ in. throw-out. 2 5/16 in. inside of Seat Corner to center of hole. 52 degrees angle of Panel. 70 degrees angle of Seat Corner.
Net price per pair.....$0.06

SQUARE CORNER.

A	B	C	
2¾	3¾	4⅝	in. long
11/16	¾	¾	in. wide.
4c	5c	6c	Net price per pair

No. 4440.

BEVELED CORNER.

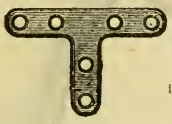


Net price per pair.
A—¾ in. wide, 4x4 in. long.....$0.05
B—¾ in. wide, 5x5 in. long..... .06
C—⅞ in. wide, 5x5 in. long..... .07
All sizes 81 degrees angle.

No. 4455.
BEVELED.
⅞ in. wide.
4x4 in. long.
65 degrees angle.
Net price per pair.$0.06

No. 4420.

T PLATES.



No. 3952.
4¼ in. long. 2¾ in. T. ¾ in. wide.
Net price per pair.....$0.04

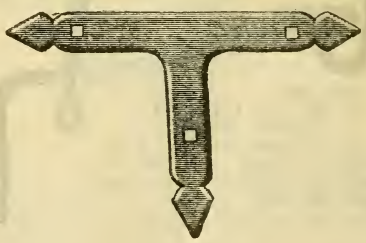
No. 3955.
A—2¾ in. long. 2⅛ in. T. ⅝ in. wide.
B—3⅜ in. long. 2½ in. T. ¾ in. wide.
C—3¾ in. long. 2¾ in. T. ¾ in. wide.
Net price per pair.....$0.04
Order by Number.

MALLEABLE IRONS.

No. 3958.
A—4⅛ in. long. 2⅜ in. T. ⅝ in. wide. ¼ in. holes. Net price per pair.....4c
B—4¼ in. long. 2½ in. T. ⅝ in. wide. ¼ in. holes.
In pairs, right and left.
Net price per pair.....$0.05

No. 3962.
5¼ in. long, 3⅛ in. T. ¾ in. wide, ¼ in. holes.
Net price per pair.....$0.05

No. 3968.
6¼ in. long. 3⅛ in. T. ⅞ in. wide. 5/16 in. holes. In pairs, right and left.
Net price per pair.....$0.06



No. 3970.
8 in. long. 5 in. T. ⅞ in. wide. ¼ in. holes. In pairs, right and left.
Net price per pair.....$0.07

No. 3875.
11½ in. long. 6¼ in. T. 1 in. wide. 5/16 in. holes. In pairs, right and left.
Net price per pair.....$0.09

MALLEABLE IRONS.

FOR FRONT SEAT.

A—5¼ in. Panel. 2½ in. length of Goose Neck. 52 degrees angle.
B—6 in. Panel, 3½ in. length of Goose Neck. 70 degrees angle.
C—7 in. Panel. 3 in. length of Goose Neck. 70 degrees angle.
Net price each 7c

No. 4600.

FOR REAR SEAT.

D—5¼ in. Panel, 2½ in. length of Goose Neck. 7/16 in. Prop Nut. 52 degrees angle.
Net price each.....7c

No. 4550.

A—6 in. Panel. 3½ in. length of Goose Neck. 7/16 in. Prop Nut. 70 degrees angle.
C—7⅛ in. Panel. 2½ in. length of Goose Neck. 7/16 in. Prop Nut. 72 degrees angle.
B—9 in. Panel. 2½ in. length of Goose Neck. 7/16 in. Prop Nut. 67 degrees angle.

TO BE BOLTED TO SEAT.

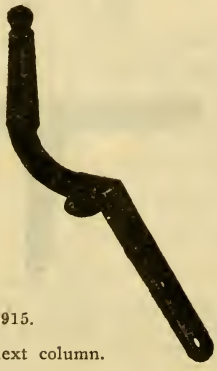
A—5 in. length over all. 2 in. projection.
Net price per pair.....10c

No. 4905.

TO BE ATTACHED TO GOOSE NECK.

7½ in. length over all. 3 in. height of finger. 1 in. projection. 7/16 in. hole. In pairs, right and left.
Net price per pair.....10c

No. 4910.



No. 4915.

Description next column.

MALLEABLE IRONS.

Description of No. 4915.

LAMP PROP.

A—3¾ in. height of finger. 2¼ in. projection. 52 degrees angle.
B—3¾ in. height of finger. 3½ in. projection. 72 degrees angle.
Net price per pair.....10c

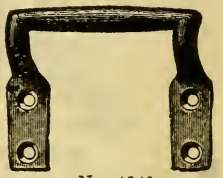
SEAT HANDLE.

2¾ in. center to center of holes. 7½ in. entire length.

No. 4335.

COACH STEP HANDLE.

3½ in. wide inside. 5 in. long.
Net price per pair..15c



No. 4340.

SEAT HANDLE.

5 in. Panel.

In pairs, right and left.
Net price per pair....13c

No. 4235.
Net price per pair 10c

No. 4245.

SEAT HANDLE.

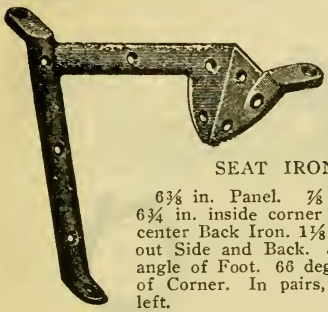
5¾ in. Panel. ⅞ in. wide. 3¼ in. foot projection. 1¼ in. throw-out. 52 degrees angle. In pairs, right and left.
Net price per pair.....15c
Order by Number.

MALLEABLE IRONS.

No. 4250.

SEAT HANDLE.

5¼ in. Panel. ⅞ in. wide. 3¼ in. foot projections. 1¼ in. throw-out. 52 degrees angle. In pairs, right and left.
Net price per pair.....13c



SEAT IRON.

6⅜ in. Panel. ⅞ in. wide. 6¾ in. inside corner of seat to center Back Iron. 1⅛ in. throw-out Side and Back. 51 degrees angle of Foot. 66 degrees angle of Corner. In pairs, right and left.

No. 4080.
Net price per pair 14c

SEAT IRON.

A—4 in. length of Brace. ¾ in. wide. 1⅛ in. throw-out. 53 degrees angle.
B—4 in. length of Brace. ¾ in. wide. 1½ in. throw-out. 53 degrees angle.
Net price per pair.....5c

No. 4120.

No. 4160.
SEAT IRON.

D—5⅛ in. Panel. ¾ in. wide. A—5⅛ in. Panel. ¾ in. wide. B—6 in. Panel. ¾ in. wide. C—6½ in. Panel. $\frac{13}{16}$ in. wide. All sizes 1¼ in. throw-out. All sizes 50 degrees angle.
Net price per pair.....10c
Order by Number.

MALLEABLE IRONS.

No. 4180.
SEAT IRON.

4⅞ in. Panel. ¾ in. wide. 1¼ in. throw-out. 41 degrees angle.
Net price per pair.....10c

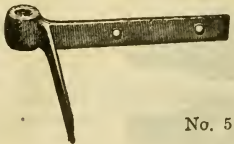
No. 4195.
SEAT IRON.

6 in. Panel. $\frac{11}{16}$ in. wide. 1¼ in. throw-out. 40 degrees angle.
Net price per pair.....10c

No. 5150.

CANOPY TOP IRONS. USED EITHER ON TOP OR BOTTOM OF BODY.

A—6 in. length over all. 4½ in. length of T over all. ½ in. hole in Socket. ¾ in. depth of Boss. 1 in. throw-out to center of hole. Net price per pair.....10c
B—8 in. length over all. 6 in. length of T over all. ½ in. hole in Socket. 1⅛ in. depth of Boss. 1 in. throw-out to center of hole.
Net price per pair 15c



No. 5145.

5x5 in. length. $\frac{13}{16}$ in. width. ½ in. hole in Socket. 1 in. depth of Boss. 1¼ in. throw-out to center of hole. In pairs, right and left.
Net price per pair.....12c
Order by Number.

MALLEABLE IRONS.

CANOPY TOP IRONS.

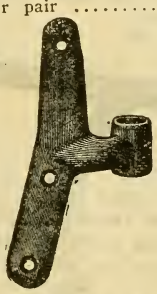
5¼ in. Panel. 3¾ in. length of foot. $1\frac{7}{16}$ in. projection. ⅞ in. wide. ½ in. hole. 52 degrees angle. In pairs, right and left.
Net price per pair.....15c

No. 5035.

No. 4985.

CANOPY TOP IRON.

A—6 in. Panel. $\frac{15}{16}$ in. wide. 1½ in. projection to center of hole. ½ in. Socket. $\frac{15}{16}$ in. depth of Boss. 70 degrees angle.
B—7¼ in. Panel. $\frac{15}{16}$ in. wide. 1½ in. projection to center of hole. ½ in. Socket. $\frac{13}{16}$ in. depth of Boss. 62 degrees angle.
C—7¼ in. Panel. $\frac{15}{16}$ in. wide. 1¾ in. projection to center of hole. ½ in. Socket. $\frac{15}{16}$ in. depth of Boss. 70 degrees angle.
D—6⅞ in. Panel. $\frac{15}{16}$ in. wide. 1½ in. projection to center of hole. ½ in. Socket. $\frac{13}{16}$ in. depth of Boss. 75 degrees angle.
Net price per pair 17c



No. 5070.

CANOPY TOP IRON.

6½ in. length of Back Plate. $\frac{15}{16}$x½ in. Socket.
Net price per pair.....15c
Order by Number.

BOX ROD NUTS AND WASHERS.

In pairs.

B—⅜ in. Rod. 3½ in. long.

No. 5875.
Net price per pair 5c
Order by Number.

MALLEABLE IRONS.

No. 5475. No. 5490.

LOW PATTERN.

				Net price per doz.
A—¼ in. holes.	$\frac{11}{16}$ in. high			5c
B—$\frac{5}{16}$ in. holes.	¾ in. high			8c
C—⅜ in. holes.	⅞ in. high			10c
D—$\frac{7}{16}$ in. holes.	$\frac{15}{16}$ in. high			12c
E—½ in. holes.	1 in. high			15c
G—⅝ in. holes.	1¼ in. high			40c

These nuts have straight holes, same as drilled (not tapered) and are ready to tap.

BOX ROD NUT.

B—⅜ in. Rod. 4¼ in. long.
Net price each..3c

No. 5910.

No. 5920.

SEAT SPRING HOOKS

Net price each.
A—2½ inches long..3c
B—3 inches long..4c
C—3½ inches long..4c
D—4 inches long..5c
1 and ½ inch hook.

No. 5980.

STAKE RINGS.

Net price per doz.
C—⅞ in. Stake. 1½ in. Ring. $\frac{5}{16}$ in. Wire 12c
D—⅞ in. Stake. 1¾ in. Ring. $\frac{5}{16}$ in. Wire 15c
E—1 in. Stake. 1⅝ in. Ring. ⅜ in. Wire 20c
F—1 in. Stake. 2 in. Ring. ⅜ in. Wire 25c

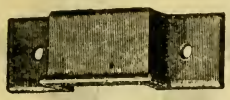
No. 5990.

BOW IRONS.

Net price each.
A—1½x2½ in. Stake. 2½ in. deep. ⅜ in. holes. 7 in. length over all.....12c
B—1½x2¾ in. Stake. 2¾ in. deep. ⅜ in. holes. 7¼ in. length over all.....15c

Order by Number.

MALLEABLE IRONS.



No. 5990.

BOW IRONS.

Price each.

A—1x2 in. Stake. 1¾ in. deep. ⅜ in. holes. 5¾ in. length over all.....$0.08

B—1⅛x2¼ in. Stake. 1⅞ in. deep. ⅜ in. holes. 6 in. length over all..... .10

C—1¼x2½ in. Stake. 2 in. deep. ⅜ in. holes. 6¼ in. length over all..... .12

No. 6055.

BOW IRONS.

B	C	D	E	F	G	
⅝	⅝	⅝	¾	¾	¾	in. deep inside.
1½	1¾	2	1¼	1½	2	in. wide inside.
3½	3⅞	4	3¼	3½	4	in. long.
$0.15	.18	.20	.15	.18	.20	net price doz.

No. 6060.

BOW IRONS.

B—¾ in. deep inside. 1½ in. wide inside.

C—¾ in. deep inside. 1¾ in. wide inside.

Holes for ¼ inch bolts.

Net price per doz.....$0.20

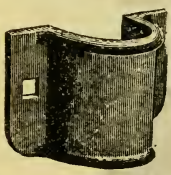
WAGON STAKE IRONS.

1¼ 1¾ in. Stake.

5½ 2½ in. deep.

Holes for ⅜ inch bolts

Price each $0.06



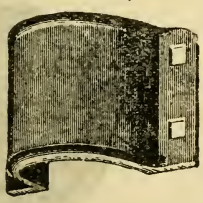
No. 6005.

2 in. Stake.

2¾ in. deep.

Holes for ⅜ in. bolts.

Price each $0.07



No. 6010.

No. 6170.

WAGON BOX BRACES.

C—8 in. high from shoulder. 10¼ in. entire length. 3 in. projection. 7/16 in. shank. 2¼ in. length of Shank. Each....$0.07

A—9¼ in. high from shoulder. 12 in. entire length. 3 in. projection, 7/16 in. Shank. 3¼ in. length of Shank. Each....$0.07

B—10¾ in. entire length. 3⅛ in. projection. 7/16 in. Shank. 2½ in. length of Shank. Each..$0.08

D—12 in. high from shoulder. 14½ in. entire length. 3 in. projection. 7/16 in. Shank. 1½ in. length of Shank. Each..$0.10

Order by Number.

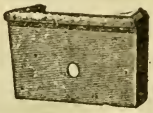
MALLEABLE IRONS.

No. 6085.

TOE BOARD BRACKET.

6¾x6¾ in. long. 1 in. wide. ¼ in. holes.

Net price per pair....$0.15



No. 6365.

BRAKE LOCK SHOES.

Price per pair.

A—2¼ in. deep. 3 3/16 in. taper of block, large end. 3 9/16 in. taper of block, small end. ¾ in. depth of flange.....$0.15

B—2⅞ in. deep. 3 15/16 in. taper of block, large end. 3 9/16 in. taper of block, small end. 1⅛ in. depth of flange..... .30

WAGON BOLSTER BRACE.

Price per pair.

A—⅞ in. wide. 6⅛ in. high, 5/16 in. bolt. 3¾ in. bolster bearing...$0.10

B—1 in. wide. 6¼ in. high. ⅜ in. bolt. 2¾ in. bolster bearing... .12

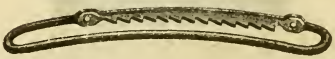
All 86 degrees Bevel.

No. 6160.

No. 6307.

Net price each.

12½ in. long. 2¾ in. wide. 8¾ in. center to center of holes. ¼ in. bolts....$0.15



No. 6310.

Net price each.

19 in. long. 3¾ in. wide. 12 in. center to center of holes. 5/16 in. bolts.....$0.25

Order by Number.

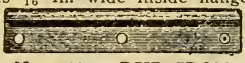
MALLEABLE IRONS.

RUB IRON.

No. 1600.

Net price per pair.

A—3 inches long.....$0.05
B—4½ inches long..... .05
C—5 inches long ..... .07
D—6 inches long ..... .07
All sizes $\frac{11}{16}$ in. wide inside flange.



No. 1602. RUB IRON.

Net price per pair.

6½ in. long. 1 in. wide inside flange....$0.07

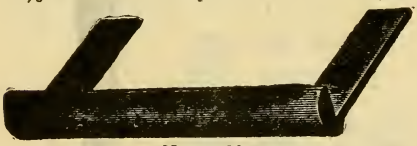
RUB IRON.

2 in. wide
4½ in. long.
Per pair, $0.07

No. 1605.

No. 1655. RUB IRON.

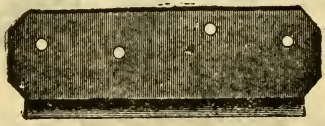
5½ in. long on face. 6⅜ in. long on back. 2⅛ in. wide. Per pair.....$0.07



No. 1680.

RUB IRON FOR LUMBER WAGONS.

7 in. long. 4 in. wide. 1 in. flange.
Net price per pair $0.15



No. 1620. RUB IRON.

Price per pair.

A—6 inches long. 2¼ inches wide....$0.07
B—6½ inches long. 3 inches wide.... .09

No. 1623. RUB IRON.

Net price per pair.

A—5 in. long. 1⅝ in. wide. 1¼ in. wide inside flange $0.10
B—6¼ in. long. 1¼ in. wide. 1¼ in. wide. inside flange ..... .15
Order by Number.

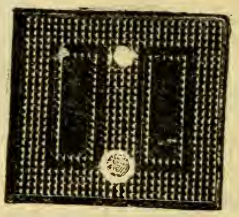
MALLEABLE IRONS.

No. 1645. RUB IRON.

6½ inches long. 2½ inches wide.
Net price per pair.....$0.10

No. 1717. STEP PAD.

A—4⅛x4⅛ inches. Net price per pair..$0.15

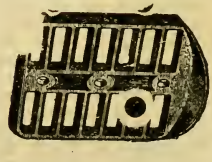


No. 1719. STEP PAD.

A—3¾x4¼ inches. Net price per pair..$0.15

No. 1726. STEP PAD.

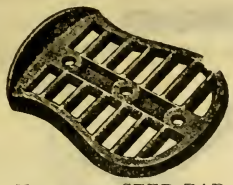
A—4½ inches. Price per pair.....$0.12



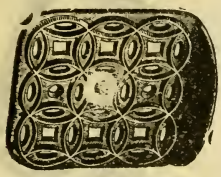
No. 1728. STEP PAD.

A—3½x3½ inches. Price per pair.....$0.08
B—4x3⅞ inches. Price per pair..... .10
Order by Number.

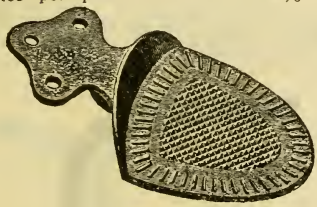
MALLEABLE IRONS.



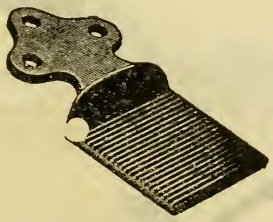
No. 1729. STEP PAD.
4¼x4 inches, net price, pair.....$0.10



No. 1740. STEP PAD.
A—Price per pair.....$0.08 3⅜x3¼ inches
B—Price per pair..... .10 4x3⅞ inches



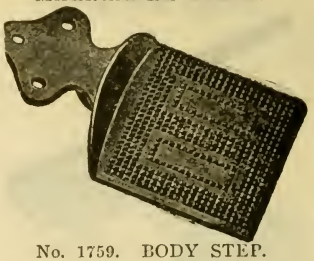
No. 1752. BODY STEP.
1 in. drop. 4¼x4⅞ in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price per pair $0.25



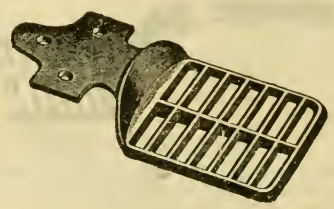
No. 1753. BODY STEP.
¾ in. drop. 3½x3⅜ in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price, per pair $0.20

No. 1756. BODY STEP.
¾ in. drop. 4¼ in. diameter of Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price per pair.....$0.20

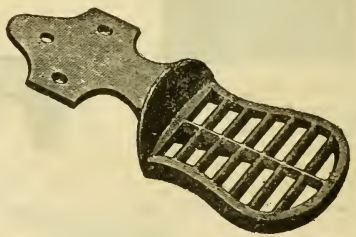
MALLEABLE IRONS.



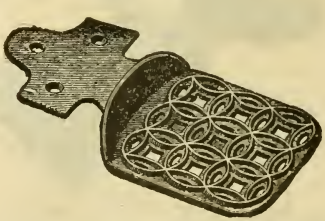
No. 1759. BODY STEP.
¾ in. drop. 4x4¼ in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price per pair $0.25



No. 1768. BODY STEP.
¾ in. drop. 4⅛x4 in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price per pair $0.20



No. 1769. BODY STEP.
¾ in. drop. 5¼ in. projection. 4x4 in. Pad. 2 in. center to center of holes. $\frac{5}{16}$ in. holes. Price per pair.....$0.25



No. 1775. BODY STEP.
A—¾ in. drop. 4½ in projection. 3½x3½ in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Per pair.....$0.15
B—¾ in. drop. 5 in. projection. 4x4 in. Pad. 1⅞ in. center to center of holes. $\frac{5}{16}$ in. holes. Net price per pair.....$0.20
Order by Number.

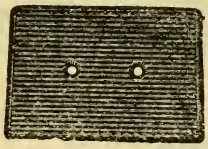
MALLEABLE IRONS.

No. 1855. BODY STEP.

3 in. drop. 5½ in. projection. 4x4 in. Pad. 5½ in. center to center of holes. $\frac{5}{16}$ in. holes. Price per pair.....25c

No. 1854. BODY STEP.

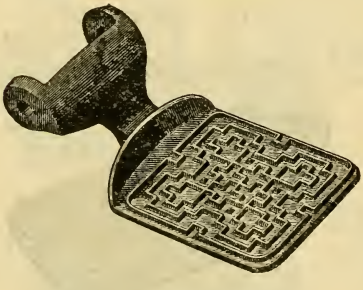
2¾ in. drop. 5¼ in. projection. 4x4 in. Pad. 5 in. center to center of holes. $\frac{5}{16}$ in. holes. Price per pair.....25c



3½x4 inch Pad.

No. 1871.
1⅝ 1⅝ in. depth of Ears.
1¼ 1½ in. Spring.
Per pair 10c
A C
⅜ ⅜ in. hole. No. 1872.

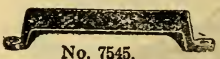
Nos. 1871 and 1872 used together for Platform Gears. Per pair.....10c



No. 1875. PLATFORM STEP.

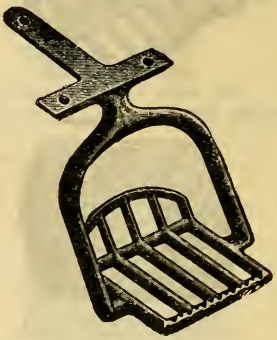
A—1¼ in. spring. 3¼x3¼ in. Pad. 2⅛ in. wide inside. 1¼ in. drop.
B—1⅜ in. spring. 3¼x3¼ in. Pad. 2¼ in. wide inside. 1¼ in. drop.
C—1½ in. spring. 3¼x3⅜ in. Pad. 2⅜ in. wide inside. 1½ in. drop.
Net price per pair.....20c
Order by Number.

MALLEABLE IRONS.



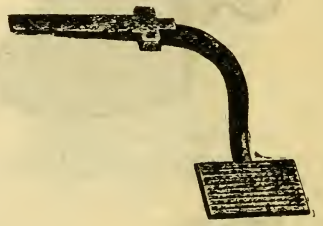
No. 7545.

SLEIGH SCRAPERS.
5⅝ in center to center.
Net price per pair....8c



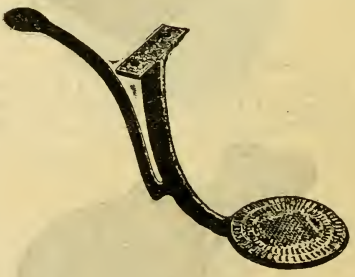
No. 1889. SLEIGH STEP.

4½ in. drop. 4½ in. projection. 3½x3¾ in. Pad. ⅞x4x4¾ in. T. $\frac{5}{16}$ in. hole.
Net price per pair.....29c



No. 1895. TIMKEN STEP.

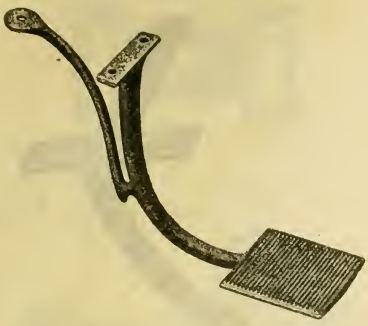
A—4¼ in. drop. 4¼ in. projection. 3½x 3½ in. Pad. 1¼ in. Clip Yoke. 5 in. T. $\frac{5}{16}$ in. Clip. Net price per pair.....30c



No. 1901. RAISED BOTTOM.

B—6½ in. drop. 7 in. projection. 4½ in. Pad. ⅞x4 in. T.
Net price per pair.....35c
Order by Number.

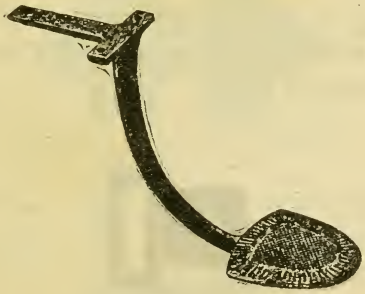
MALLEABLE IRONS.



No. 1903. BUGGY STEP.

Price per pair.

A—6½ in. drop. 6¾ in. projection. 3½ x4 in. Pad. ⅞x4 in. T.....$0.35
B—8 in. drop. 7½ in. projection. 3½x4 in. Pad. ⅞x4 in. T..... .40
C—9¾ in. drop. 6½ in. projection. 4x 4½ in. Pad. ⅞x4¼ in. T..... .45
E—11 in. drop. 5 in. projection. 3½x4 in. Pad. ⅞x4 in. T..... .45



No. 1907. PHAETON OR BUGGY STEP.

Price per pair.

C—6½ in. drop. 5¾ in. projection. 4½x 4x4¼ in. Pad. ⅞x4x4½ in. T.....$0.30
D—7½ in. drop. 8 in. projection. 5x4½ in. Pad. ⅞x4x4½ in. T..... .45

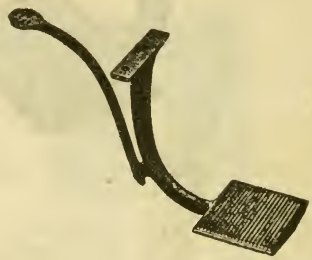
No. 1951. SHAFT STEP.

Net price per pair.

3¼ in. rise. 7 in. projection. 4½x4½ in. Pad. ⅜ in. Clip.....$0.30
Order by Number.

No. 1921. PHAETON STEP.

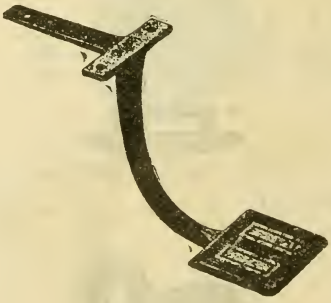
D—6½ in. drop. 6 in. projection. 5 in. Pad. ⅞x4x5¾ in. T. ¼ in. raise to back T. In pairs, right and left. The T is curved to shape of Phaeton body sill. Per pair....$0.35



No. 1947.

Price per pair.

A—6½ in. drop. 7½ in. projection. 4x 4½ in. Pad.....$0.45
B—6½ in. drop. 7¾ in. projection. 3¾x 4¼ in Pad ..... .40

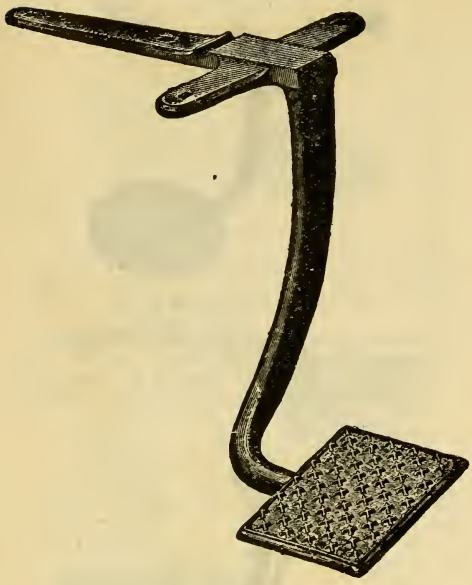


No. 1909. BUGGY STEP.

Price per pair.

A—7 in. drop. 6½ in. projection. 3½x4 in. Pad. ⅞x4x6 in. T.....$0.35
B—6 in. drop. 7½ in. projection. 3½x4 in. Pad. 1x5x6¾ in. T..... .35
D—6½ in. drop. 5½ in. projection. 3½x 4 in. Pad. 1x5½x6 in. T..... .30
E—8 in. drop. 8 in. projection. 4⅛x4⅝ in. Pad. 1x5½x6 in. T..... .45
Order by Number.

MALLEABLE IRONS.



No. 1960. EXPRESS WAGON SHAFT STEP.

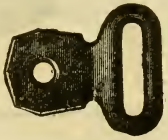
A—7½ in. drop, 6¼ in. projection, 3¾x4¼ in. Pad. 1¼x9½ in. T. $\frac{5}{16}$ in. square holes.
B—9 in. drop, 6⅛ in. projection, 3⅝x4⅜ in. Pad. 1¼x7x9½ in. T. ⅜ in. square holes.
In pairs, right and left, per pair.....$0.65

No. 6400. CHECK LOOP.

A	B	C	D	E	F	
⅞	1	1⅛	1¼	1½	1¾	in. loop.
2¼	2½	2¾	3	3¼	3½	in. long.
$0.06	.06	.08	.08	.10	.10	per doz.

No. 6405. NECK YOKE LOOP.

⅞ in. wide. 1⅝ in. loop. $\frac{3}{16}$ in. holes.
Price per doz., $0.20.



No. 6427. OVAL CHECK LOOP.

A	B	C	D	E	F	
¾	⅞	1	1⅛	1¼	1½	in. loop.
1⅝	1⅝	2	2	2	2⅛	in. long.
$0.16	.18	18	.20	.22	.24	per doz.

Order by Number.

MALLEABLE IRONS.

No. 1955. EXPRESS WAGON SHAFT STEP.

4½ in. drop. 5¾ in. projection. 3x3¾ in. Pad. ⅞x4½x4½ in. T.
In pairs, right and left, per pair.....$0.30

Order by Number.

No. 6430. SQUARE CHECK LOOP.

A	B	C	D	E	
⅞	1	1⅛	1¼	1½	in. loop.
1¾	1⅞	1⅞	2	2⅛	in. long.
$0.16	.18	.18	.20	.24	per doz.

No. 6435. OVAL CHECK LOOP.

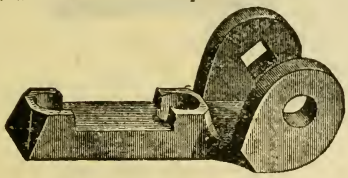
A	B	C	D	E	F	
¾	⅞	1	1⅛	1¼	1½	in. loop.
2¼	2⅜	2¾	2⅞	3	3⅜	in. long.
$0.20	.20	.22	.22	.24	.30	per doz.

Order by Number.

MALLEABLE IRONS.

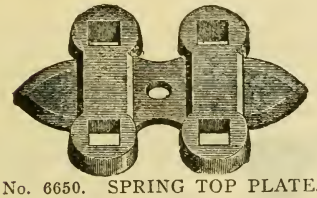
No. 6437. SQUARE CHECK LOOP.

A	B	C	D	E	
⅞	1	1⅛	1¼	1½	in. loop.
2½	2¾	3	3¼	3½	in. long.
$0.20	.22	.24	.26	.30	per doz.



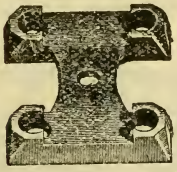
No. 3907. SLEIGH SHACKLE.
In pairs, right and left.

	Per pair.	Axle.	Clip.	Draw Bolt.	Shaft Eyes.
A	$0.10	1 in.	5/16 in.	⅜ in.	1 in.
B	.12	1⅛ in.	⅜ in.	⅜ in.	1⅜ in
C	.14	1¼ in.	⅜ in.	7/16 in.	1¼ in.



No. 6650. SPRING TOP PLATE.
With Square Holes.

A	B	C	E	F	G	
1¼	1¼	1⅜	1½	1¼	1½	in. Spring
1	1⅛	1⅛	1¼	1¼	1⅛	in. Axle.
5/16	5/16	⅜	⅜	⅜	⅜	in. hole.
$0.03	.03½	.04	.04½	.04½	.05	price each



No. 6667. AXLE BOTTOM PLATE.
With Round Holes.
Nos. 6650 and 6667 are used together in pairs.
Net price each $0.02

No. 6615. SPRING BLOCK.

A	B	C	G	H	D	E	F	
1	1⅛	1⅛	1⅛	1¼	1¼	1¼	1⅜	in. Axle
1¼	1¼	1⅜	1½	1¼	1⅜	1½	1¾	in. Spring.
5¼	5¼	5⅜	5½	5½	5⅝	5⅝	6	in. long.
$0.07	.08	.08	.09	.09	.10	.10	.15	each.

Order by Number.

MALLEABLE IRONS.

No. 6620. SPRING BLOCK.

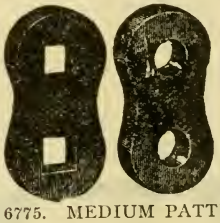
A	B	C	D	E	F	
1	1⅛	1⅛	1⅛	1¼	1⅜	in. Axle.
1¼	1¼	1⅜	1½	1½	1½	in. Spring.
6	6¼	7¼	7¼	7½	7½	in. long.
5/16	5/16	⅜	⅜	7/16	7/16	in. holes.
$0.08	.08	.10	.12	.12	.12	each.

SPRING SHACKLE

No. 6835.

B	C	D	
1⅛	1⅛	1¼	in. Bar.
1¼	1⅜	1¼	in. Spring.
	5/16	5/16	in. holes.

Net price each, $0.03.



No. 6775. MEDIUM PATTERN.
⅜ in. Thick in Pairs.

B	C	D	F	
1¼	1⅜	1½	1¾	in. from center to center of holes.
⅜	⅜	⅜	⅜	in. holes.

Net price per pair, $0.05.

No. 6765. SPRING SHACKLE.

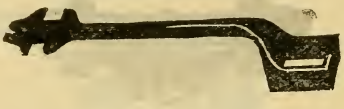
A	B	C	D	
1¼x1¼	1¼x1½	1⅜x1⅜	1½x1½	
⅜	⅜	⅜	⅜	in. holes.
$0.03	.03	.04	.04	price each.

No. 6780. SPRING SHACKLE.

AA	F	A	B	G	C	D	E	
1½	1¾	2	2¼	2¼	2½	2¾	3	in. bet. Ears
⅜	½	½	9/16	½	⅝	¾	¾	in. holes.
$0.04	.07	.09	.12	.10	.14	.18	.20	price each.

Order by Number.

MALLEABLE IRONS.



No. 7320. BUGGY WRENCH, DEEP PATTERN.

Net price each.

A—¾ in. Axle Nuts. ½, ⅝, ¾ in. opening. 9 in. long.....$0.04
B—⅞ in. Axle Nuts. ½, ⅝, ¾ in. opening. 9 in. long ..... .04
C—1 in. Axle Nuts. ½, ⅝, ¾ in. opening. 9½ in. long ..... .04
D—1⅛ in. Axle Nuts. ½, ⅝, ¾ in. opening. 10 in. long ..... .05
E—1¼ in. Axle Nuts. ½, ⅝, ¾ in. opening. 10 in. long ..... .06
F—1⅜ in. Axle Nuts. ½, ⅝, ¾ in. opening. 10½ in. long ..... .07
G—1½ in. Axle Nuts. ½, ⅝, ¾. in. opening. 12 in. long ..... .08
H—1¾ in. Axle Nuts. ⅝, ¾, ⅞ in. opening. 12 in. long ..... .12
J.—2 in. Axle Nuts. ⅝, ¾, ⅞ in. opening. 12 in. long ..... .14

No. 7325. BUGGY WRENCH, OCTAGON PATTERN.

Each.

A—To take Hexagon Nut for ¾ in. Axle ½, ⅝, ¾ in. opening. 7¾ in. long....$0.05
B—To take Hexagon Nut for ⅞ or $\frac{15}{16}$ in. Axle. ½, ⅝, ¾ in. opening. 7¾ in. long ..... .05
C—To take Hexagon Nut for 1 or $\frac{11}{16}$ in. Axle. ½, ⅝, ¾ in. opening. 8¼ in. long ..... .06
D—To take Hexagon Nut for 1⅛ in. Axle ½, ⅝, ¾ in. opening. 8½ in. long.. .07
E—To take Hexagon Nut for 1¼ in. Axle ½, ⅝, ¾ in. opening. 9 in. long..... .08
F—To take Hexagon Nut for 1⅜ in. Axle ½, ⅝, ¾ in. opening, 9 in. long..... .09

No. 7338. FINISHER'S WRENCH.

For Blacksmiths or Gear Workers.

Price each.

A—To take Nuts for $\frac{3}{16}$ and ¼ in. Bolts. ⅜x½ in. opening $0.05
B—To take Nuts for ¼ and $\frac{5}{16}$ in. Bolts. ½x1⅝ in. opening..... .05
C—To take Nuts for $\frac{5}{16}$ and ⅜ in. Bolts. ⅝x⅞ in. opening ..... .06
D—To take Nuts for ⅜ and $\frac{7}{16}$ in. Bolts. ¾x⅞ in. opening ..... .08

PERFECTION DOOR LATCH.

No. 5686.
10¾ in. long, 2¼ in. wide.
Net price each..... $0.50
For right hand door only.

END GATE FASTENERS.

No. 5697.

A	B	C	D	E	F	G	
½	⅝	¾	⅞	1	1⅛	1¼	in. Panel
8⅛	8½	8⅞	9¼	9¾	10¼	10¾	in. legth Sp'g
$0.22	.24	.25	.26.	.27	.30	.37	per pair.

Crucible Steel Springs.

END GATE HINGES.

No. 5810.

A	B	
9	13	in. Panel.
¾	1	inch wide.
$0.22	.29	per pair.

UMBRELLA HOLDERS.

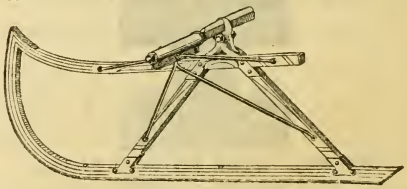
No. 5960.

A	B	
1¼	1½	in. diam. hole.
1¼	1¼	in. deep.
$0.05	.10	net each.

A	B	
1⅛	1⅜	in. diam. hole.
1	1	in. deep.
$0.05	.10	net each.

No. 5961.

WYETH RUNNER ATTACHMENTS.



Adjustable, Narrow or Wide Track.

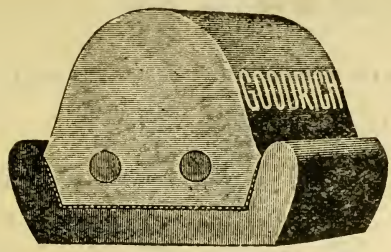
Net price set.

No. 1, ⅞ Axle Weight 45 lbs.....$5.85
No. 2, 1 Axle Weight 45 lbs..... 5.85
No. 3, 1⅛ Axle Weight 50 lbs..... 6.75
No. 5, 1¼ Axle Weight 60 lbs..... 7.00
No. 6, 1⅜ Axle Weight 75 lbs..... 7.95
No. 7, 1½ Axle Weight 75 lbs..... 8.25
No. 8, 1⅝ Axle Weight 85 lbs..... 8.75
No. 9, 1¾ Axle Weight 85 lbs..... 9.00

For Carriages, Buggies, Grocers' Wagons, Hacks, Omnibuses, Laundry Wagons, Surreys, Phaetons, Dairymen's Wagons, Hearses, Oil Tank Wagons, and all kinds of low down vehicles. Clamps attach to square part of axle, relieving spindles from strain. Rear Runners are two inches higher than the front, so vehicle will set level. Painted vermillion.

RUBBER TIRE.

Shipped from factory.



We can either furnish you with new wheels having rubber tire or can put new rubber on your old wheels. We use only the very best grade of rubber, and can give you prompt service at all times.

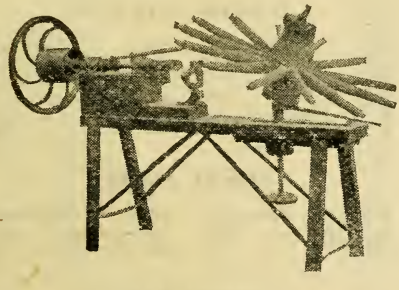
NET PRICE OF RUBBER TIRE.

Per Strip Enough for One Wheel.

Sizes, inches	¾	⅞	1	1⅛	1¼
For Wheels 3 feet 2 inches diameter (or under)	$1.82	$2.07	$2.55	$4.02	$5.20
For Wheels 3 feet 4 inches diameter	1.90	2.18	2.70	4.24	5.40
For Wheels 3 feet 6 inches diameter	2.00	2.27	2.80	4.45	5.70
For Wheels 3 feet 8 inches diameter	2.12	2.38	2.92	4.55	5.90
For Wheels 3 feet 10 inches diameter	2.18	2.48	3.04	4.80	6.10
For Wheels 4 feet diameter	2.30	2.55	3.18	5.00	6.40

We are in a position to give you the best of satisfaction by placing Goodrich solid rubber tires on your new or old wheels, also by re-rubbering your old channels. Send us the height and tread of your wheels and the size tire desired and receive our prices. Where re-rubbering is desired the old channels must come to us in good condition and perfectly clean.

See our prices on new wheels and get our prices for furnishing whatever size you desire complete with Goodrich solid rubber tires put on.



DAVIS PATENT TENON MACHINE.

For light or heavy work; to be used by hand or power; fitted with tight and loose pulleys. When run by power remove crank wheel and put on collar. Cuts tenons up to 1¼ inch to 4 inches long. Any Hollow Auger with ½ round shank may be used or chuck for square shank auger will be furnished if desired. Hub of wheel held on self-centering rest which can be raised, lowered, or tilted to adjust spoke to auger, thus all tenons are cut uniform. The only machine on the market that a tenon may be cut straight with the spoke on a dishing wheel.

Power machine, without auger, each	$32.00
Hand machine, without auger, each	25.00
With Wood's Universal Hollow Auger, extra	3.00

DOORS—WINDOWS AND PORCH TRIMMINGS.

We carry a complete line of building material and are offering to our customers, for the first time, doors, windows, and porch trimmings through our catalogue. Our stock of these goods is selected and of the very best quality and we have made our prices as low as possible.

4-PANEL DOORS IN WHITE.

Size.	No. 1. 1⅜ Thick Price Each.	No. 2. 1⅛ Thick Price Each.	No. 2. 1⅜ Thick Price Each.
2⁰x6⁰	$....	$1.52	$1.84
2⁰x6⁶	....	1.68	1.85
2⁰x6⁸	....	1.77	1.87
2²x6⁶	....	1.77	1.89
2⁴x6⁴	....	1.65	....
2⁴x6⁶	....	1.77	1.89
2⁴x6⁸	....	1.80	....
2⁶x6⁶	2.17	1.77	1.96
2⁸x6⁸	2.24	1.82	2.01
2⁸x6¹⁰	....	....	2.31
3⁰x7⁰	2.87	....	2.59
Special 2⁶x6⁶ Painted		1.35	1.46
Special 2⁸x6⁸ Painted		1.41	1.54

WINDOWS—1⅜ THICK.

In measuring windows the size of the glass is given and not the opening the window will fill. The width of the glass is always given first.

2 Light Check Rail.

Size of Glass.	Price each.
20x24	$0.90
20x26	.99
20x28	1.01
20x30	1.06
24x20	.97
24x24	1.02
24x26	1.06
24x28	1.16
24x30	1.22
26x28	1.30
26x30	1.38
28x28	1.38
28x30	1.39

4 Light Check Rail.

Size of Glass.	Price each.
12x24	$1.02
12x26	1.07
12x28	1.14
12x30	1.25
14x24	1.13
14x26	1.25
14x28	1.31

12 Light Plain Rail. 1⅛ inch.

Size of Glass.	Price each.
8x10	$0.88
8x12	1.01
10x12	1.14

CELLAR SASH.

3 Light

Size of Glass.	Single Glaze. Price each.	Double Glaze. Price each.
8x10	$0.45	$0.70
8x12	.50	.78
9x12	.52	.81

2-LIGHT SINGLE GLAZE.

	Price each.
12x14	$0.56
12x16	.59

TRANSOMS—1 LIGHT.

Size of Glass.	Price each.
30x16—1 Light	$0.50
32x16—1 Light	.53

1-LIGHT HOUSE SASH.

Size of Glass.	Price each.
20x19	$0.70
20x24	.75
24x24	.86
24x28	.93
24x30	.98

1-LIGHT STALL SASH.

Size of Glass.	Price each.
12x16	$0.42

COTTAGE CHECK RAIL WINDOWS.

With plain upper sash.

Size of lower sash.	Size of lower sash.	Price each.
36x42	36x14	$3.00
36x44	36x16	3.25
40x40	40x16	3.57
44x40	44x16	4.33
44x44	44x16	4.69
48x44	48x16	5.18
With fancy upper sash.		
36x40	36x16	3.20
40x40	40x16	3.58
44x40	44x16	5.51

BRACKETS.

	Price each.
10x12 Corner brackets	$0.10
8x20 Face brackets	.25
8x24 Face brackets	.30
8x30 Face brackets	.45

BALUSTERS AND SPINDLES.

1¾x20 and 24 inches long, price each	$0.05
1¾x10 Spindles, price each	.03

BLOCKS.

	Price each		Price each
4½ Corner	$0.05	4½ Plinth	$0.10
5 Corner	.05	5 Plinth	.10

TURNED COLUMNS.

Size.	Price each.	Size.	Price each.
4x4—8 ft.	$1.00	5x5—9 ft.	$1.35
5x5—8 ft.	1.15	6x6—9 ft.	1.85
6x6—8 ft.	1.55		
8 in. Round—8 ft.			$2.50
8 in. Round—9 ft.			2.85

NEWEL POSTS.

Size.	Price each.	Size.	Price each.
5x5 Plain	$0.70	5x5 Turned	$0.75
6x6 Plain	.80	6x6 Turned	.85

PORCH RAIL.

1¾x3 Top or Bottom, price per ft. $0.04

LATH AND SHINGLES.

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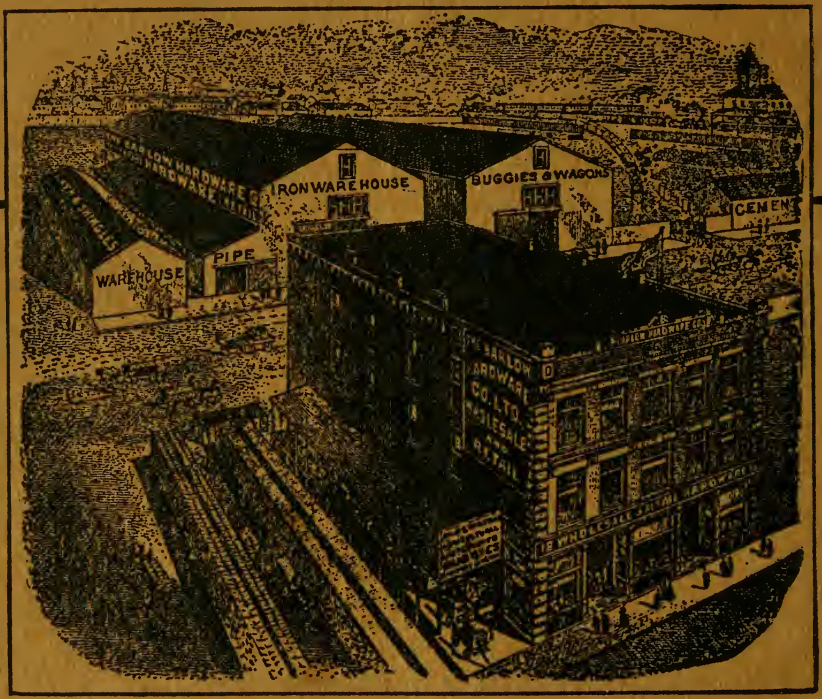

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